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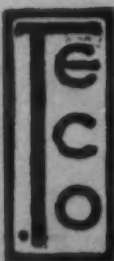
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THE BRICKBUILDER

VOLUME XV

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NUMBER 9

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	PAGE		PAGE
Agencies—Clay Products	II	Brick Enameled	III and IV
Architectural Faience	II	Clay Chemicals	IV
“ Terra Cotta	II and III	Fireproofing	IV
Brick	III	Roofing Tile	IV

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CONTENTS

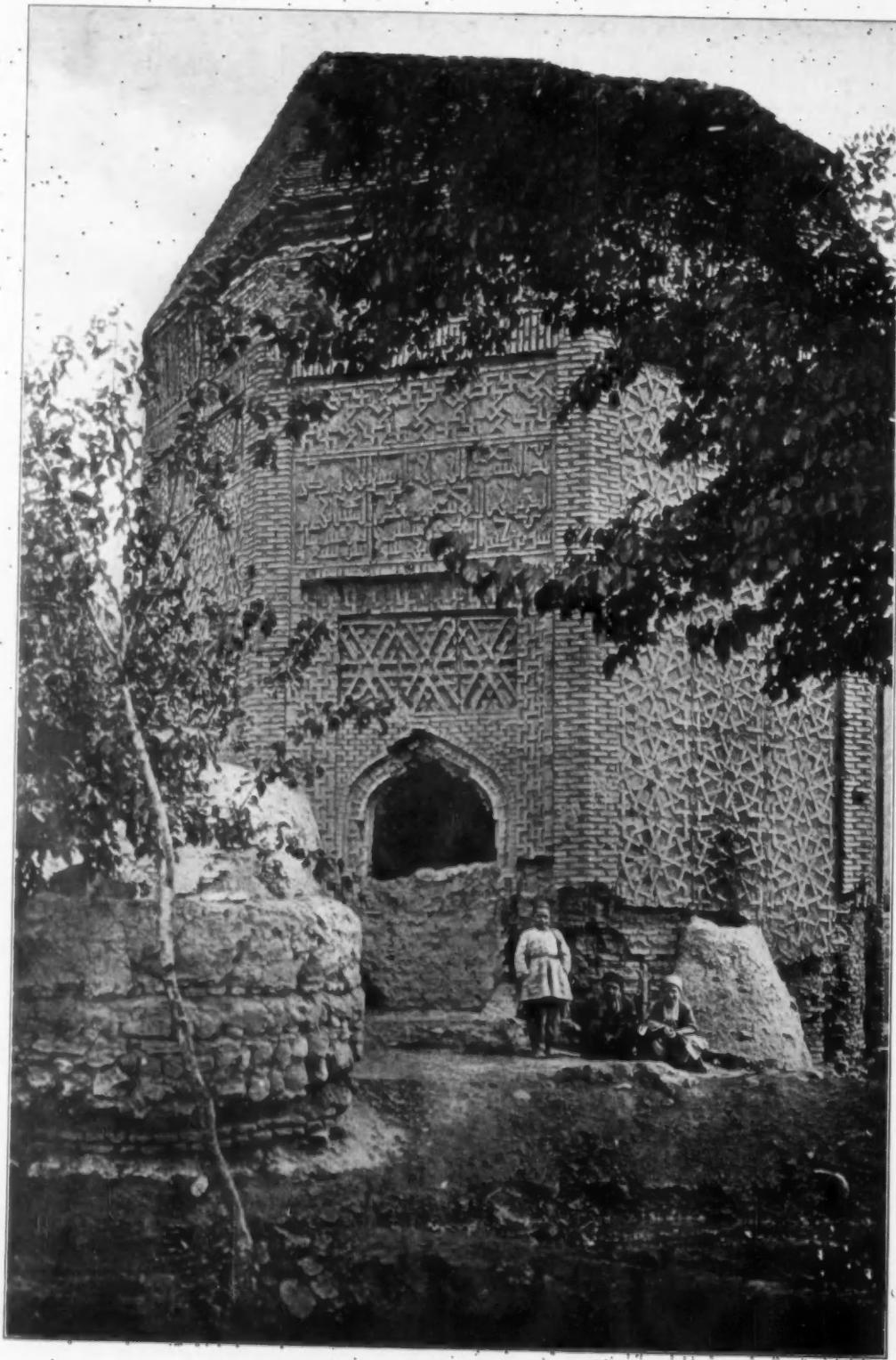
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LETTERPRESS

	PAGE
MAUSOLEUM AT NACHTSCHEWAN, PERSIA	Frontispiece
EDITORIALS	177
THE GROUP PLAN. II. THE ELEMENTAL TYPES OF COMPOSITION	179
RECONSTRUCTION OF THE FLOORS IN THE EQUITABLE BUILDING, BALTIMORE, MD.	182
SUGGESTIONS FOR ARCHITECTURAL TRAVEL IN SPAIN	184
THE RELATION BETWEEN ENGLISH AND AMERICAN DOMESTIC ARCHITECTURE. THE ESSENCE OF MODERNITY	189
EDITORIAL COMMENT AND SELECTED MISCELLANY	194



MAUSOLEUM AT NACHTSCHEWAN, PERSIA.

THE BRICKVILDER

VOL. 15 No. 9

DEVOTED TO THE INTERESTS OF
ARCHITECTURE IN MATERIALS OF CLAY

SEPTEMBER 1906

THE NET RESULTS.

THE International Congress of Architects, which was fully reported in our last issue, was in nearly every respect a great success. In attendance, in enthusiasm and in variety of topics discussed, it was everything which could have been anticipated. It is only when one tries to measure the tangible resulting good to the profession that there is any question as to how far and in what measure congresses of this sort accomplish their avowed mission of furthering the cause of good architecture. Considered merely as excuses for kindred architectural spirits to meet and discuss topics of mutual interest, as opportunities for encouraging a fraternal feeling among architects, and as occasions for showing to the public at large that architecture is a well-organized, coherent profession, these congresses are eminently successful.

But one cannot seriously study the reports of such conventions and congresses without a feeling of regret that, where so much effort has been expended, so much thought has been given to the elaboration of themes well worth considering, and so much said that should have lasting effect, all this effort should really reach only a very few, and that the results of all these congresses should so often be stowed away in the files of the architectural periodicals, seldom seen or consulted. That is the one respect in which architectural gatherings do not altogether realize their expectations. The discussions of fruitful topics usually are followed only by a limited number who were present at the meeting, who, it is true, carry away vivid impressions which are of value in the daily life of the profession, but who are seldom to pass along such impressions to their less fortunate brethren who remain behind over the drawing board.

Even with the most careful reporting the real spirit and enthusiasm of a congress such as this cannot be appreciated by proxy. Furthermore, without in the least decrying the high order of talent represented by the delegates, there are many who never take part who are numbered among the very best architects, and from whom we would expect the greatest amount of helpful criticism and advice. It is the active practitioner that we listen to most effectively, the man who not only thinks and says things, but does them, — the architect who is often so busy that he has no time to prepare papers, much less to read them in a far country. This, of course, is inevitable, but it is none the less to be regretted.

Also, notwithstanding the enthusiasm which is so easily aroused in a gathering such as took place at London, the very size of the body operates against that free expression of opinion which does the profession so much good. We cannot help walking on stilts a little when addressing a large body of thinking men, but it is precisely because we do not profit most by stilted talks that one could wish the proceedings of such congresses could be more personal and less professional, if that expresses the case.

In the desire to give each country a representation in the proceedings, it has seemed to us that the programmes must have been overloaded, and that if each day's proceedings had been cut down one-half and only the very choicest, most crisp thoughts could have been condensed into short, direct address, the academic character of the proceedings would have been much less manifest, and a livelier benefit would have accrued to all the listeners. At the same time, it would also have been much more likely that the reports of such proceedings would carry with them the true kernel of thought which would be of benefit to those who would read only at a distance. We can never hope to influence many readers or people with long discourses and it is easy to imagine a congress even larger in numbers than that of London, but with the speech-making and paper-reading reduced, and concentrated to a few hours of really earnest and profitable discourse.

It will be noticed that Mr. Kelsey very gracefully invited the Congress to meet year after next in this country. We can then have a chance to see whether we can do things any better on this side of the water.

EDUCATION OF THE PUBLIC IN ARCHITECTURE.

TO our mind the best thought was called out at the London International Congress of Architects by the discussion of the subject of the "Education of the Public in Architecture." In the discussion, it seemed to be accepted by some of the delegates as a matter of course that the public is not interested in architecture, and that, therefore, this interest has to be awakened, carefully cultured and encouraged up to a more or less general appreciation of the particular manifestations which the architects have in mind. This may be true in England. To

a certain extent it is true everywhere, but in a sense it is fundamentally untrue. Certainly there is no manifestation of human effort which reaches the general people more thoroughly than architecture. There is no means by which money can be so effectively spread around among all classes of people as by building, and it is again and again shown in all of our large cities that the public is alive to architecture, wants to know about it and takes a deep interest in building operations.

The public certainly is not interested in architectural exhibitions. We admit that fully, and even the constant efforts of all our architectural societies have not yet resulted in a single architectural exhibition which could in any sense be called popular. But we do claim that building operations, especially when they lead to a large and imposing architectural effect, are studied with the utmost daily attention by all classes of people. The public in this country certainly wants public art. It welcomes it, and if it is indiscriminate in its approval, we question if this is not quite as much the fault of the architects as of the public.

The real necessity for education, in our minds, is not to teach the public what is good architecture, so much as to bring them to a closer appreciation of the function the architect plays in public work. To many people he is still a sort of upper craftsman; less businesslike than a mason; not as practical as a carpenter; but one who increases the cost of a building from some unknown reason, and keeps the builders all guessing. Any one who looks back over the progress of the profession in this country for the last quarter of a century, can readily appreciate how modern a thing the American architect is, and how little he is understood. The nation, the cities, the individuals, have thrown opportunities at the profession with both hands. The profession has never been quite equal to it, but has made a brave fight and is fighting still.

When we say that the public appreciates architecture, we do not mean that the appreciation is a knowing or an intelligent one. It simply likes a large, handsome piece of building construction, and, generally speaking, the public that goes by on the street will take kindly to the really good architectural monuments. There is, however, beyond question, a great work to be done, and the suggestion that was made at the Congress by M. Anciaux, to educate the public by means of the creation of museums of architecture, is one which deserves careful consideration, and which, if carried out very generally, would undoubtedly do a great deal to bring about the desired results. It is safe to say that the collection of architectural casts in the Metropolitan Museum at New York is studied and admired more than any other one feature of that magnificent collection, and there ought to be similar collections in all of our large cities. Whether the time is yet ripe for them to be independent collections is a question. Even now nearly all of our museums have a more or less general collection of architectural casts, and if these could be enlarged so as to be more specific in their illustrations, — to include models of complete buildings of the best type, with examples of decorations of furnished interiors, and with, perhaps, in connection therewith, exhibitions of architectural drawings, — they would become powerful educational agents.

THE CONDUCT OF INTERNATIONAL ARCHITECTURAL COMPETITIONS:

THE recent fiasco of the competition for the Peace Palace at The Hague was so strong in the minds of European architects that it necessarily suggested a very lively discussion at the London Congress of Architects. Our own remedy for the evils of an international competition would be not to have any. We see no reason to believe that any country would gain by importing directly outside talent for its assistance. It is not conceivable that an outsider would be as likely to give any national monument its local character as those properly to the manner born. Quite aside from the question as to whether or not a competition for any building is desirable, it is beyond dispute that no International Competition has ever resulted in anything but failure.

In the discussions on this subject at the Congress the anonymity of all competitions seemed to be accepted as a matter of course. At the last convention of the American Institute at Washington, a proposal was made that all competitive drawings should be signed by the full name of the author. We have no sympathy with the theory that would impose a blind chance upon the results of any competition, neglecting entirely the personality of the architects themselves, and striving to arrive at a decision based upon a fortuitous display of more or less accurate drawings. Personality is one of the strong features in architecture, and to disregard it entirely is to insure failure. This has been proven over and over again so conclusively by competitions here and elsewhere, that it is rather surprising no mention of this shortcoming should have appeared in this discussion at London.

A MINISTRY OF THE FINE ARTS.

IN the presidential address of welcome, given by Mr. John Belcher at the London Congress of Architects, the speaker called attention to one of the defects in the architectural conditions of Great Britain, which is in a measure a lack also in this country. England has no Ministry of Fine Arts nor any similar authority to watch over the interests of the public in respect to the art as distinguished from the science of building. In the United States that function is assumed by something which does not seem to have its exact counterpart abroad, represented by our municipal art societies, civic art commissions, art leaguers and kindred associations. All of these are creations of comparatively recent years. In fact, it is doubtful if there was an art society of any sort in this country possessing any weight of influence prior to the Columbian Exhibition year. Public opinion is now represented very efficiently in most of our large cities by private association, which aims to formulate the best properties and wishes of the best practitioners in architecture and art. For nearly ten years these societies worked in the dark, with little results. But with the inception of the improvements in Washington a national change has begun, and we believe it is fair to say that the results which have been accomplished by our various municipal art organizations have been more potent for good, and have actually accomplished more results than would have been possible with any Ministry of the Fine Arts.

The Group-Plan. II.

THE ELEMENTAL TYPES OF COMPOSITION.

BY ALFRED MORTON GITHENS.

WE have said that there seem to be barely six or eight elemental types of plan composition and that most groups are made up of one or more of them. Now we will take up these types seriatim.

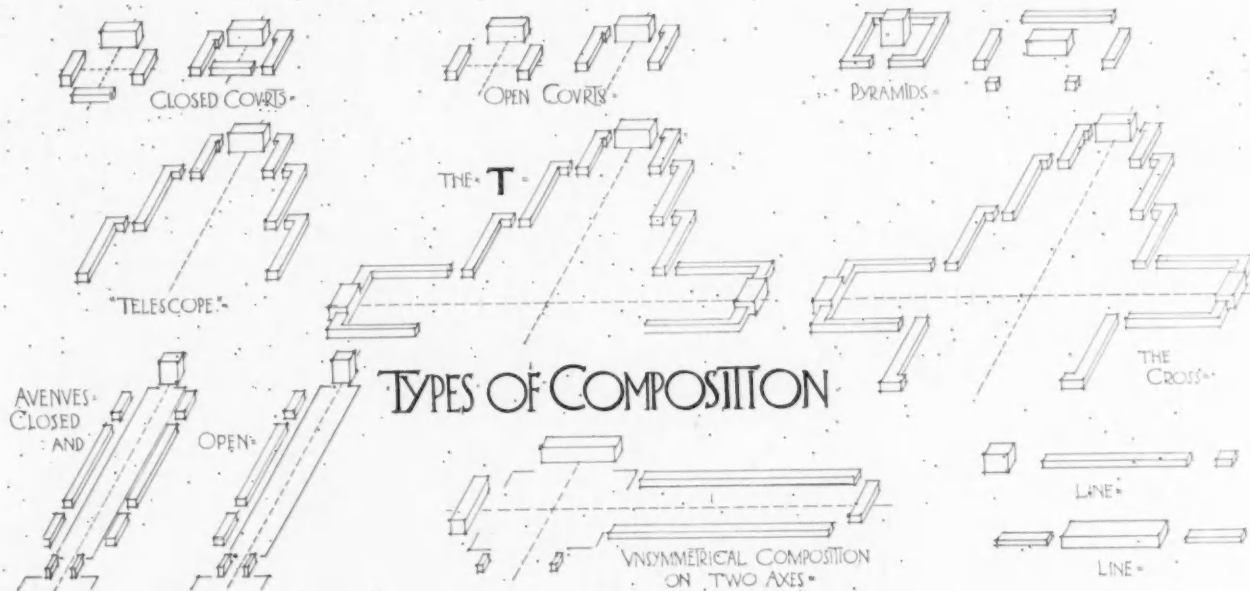
THE CLOSED COURT.—The simplest and historically the first is the *closed court*. Originally planned for defence against outsiders and yet that it might be open to the air within, it persisted as the type plan for seclusion and privacy. The houses of Greece and Rome and the mediæval cloisters and colleges are examples. Through its monumental possibilities it became the type for the palaces and *fora*.

Just now, especially in America, it is in disfavor. The court open on one side, to the south if possible, is

approach. There are countless examples of all degrees of importance from the little Orphans' Home at Wallingford at the end of its country lane, to the palaces of the Louvre or Versailles, terminating two of the greatest vistas of the world.

This *composition* is sometimes chosen for another reason; the open side may be an outlook merely, as in the Fine Arts Square of the California University, which overlooks a grove of pine trees, the most attractive natural feature of the Berkeley hillside. Mr. Flagg has twice used the *open court* in the Annapolis Academy; the Campus and Amphitheater face the Severn River, and the Parade the Chesapeake.

This group suggests a peculiarity of many American compositions; an entire indifference to the corners of a *court*,—important as the sides and far more difficult to compose. Many arrangements have been tried and a few successfully. The buildings may be frankly separated as in the Berkeley "College Square," where



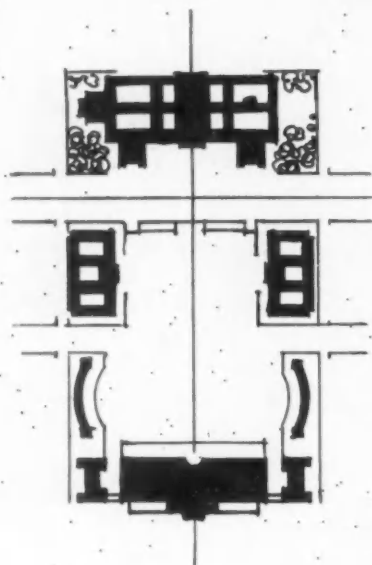
preferred, as giving more light and air, and the *closed court* seldom chosen except in cities where space is limited. The entrances to it are usually either choked, as in fortified mediæval buildings, or else not given their deserved importance. When well arranged of course no composition can be more dignified. Witness the great central court of M. Bénard's University of California, the "college square," as it has been called, for it is the ideal type of a city square in arrangement; that is to say, no avenue finds its termination there, but the circulation passes through it in one side and out the opposite, connecting it with the technical and scientific buildings above and the Fine Arts Square and city below.

THE OPEN COURT.—A *closed court* is only partially effective as the termination of a great avenue, for the building in the forefront hides those behind; remove it and the three sides remaining are all effective. This is the *open court*, the second of the *compositions* and that most often used in modern planning. The entrance is no longer a difficulty, for the open side is naturally the

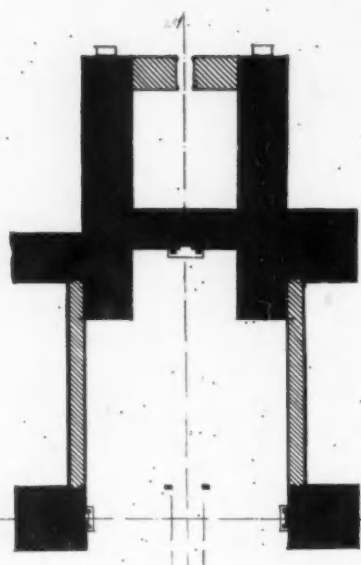
masses of high trees form the upper corners of the court; the corners connected by low arches, curved as in the "Palais d'Enfance," or rectangular as in Mr. Howard's University of California; the wings placed in line with the end pavilions of the central building, and so masking them as in M. Eustache's Gare; the wings flanking the central building and so masked by it, as in M. Bénard's Fine Arts Square, perhaps open to criticism because each symmetrical wing is partly covered by the Central Museum. M. Prost in his Imprimerie Nationale partially overcomes this last difficulty, for each wing is dissymmetrical, with one of its end pavilions especially designed to link it to the central building.

Corners in Gothic courtyards are always strong. The entrance tower is sometimes there or even the great hall as in Cardinal Wolsey's quadrangle at Christ's College, Oxford.

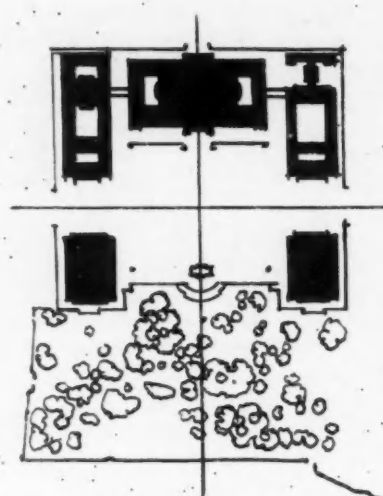
The French under the Bourbons preserved this tradition and reinforced the corners with projecting pavilions. A recessed corner, so common under the Empire, was



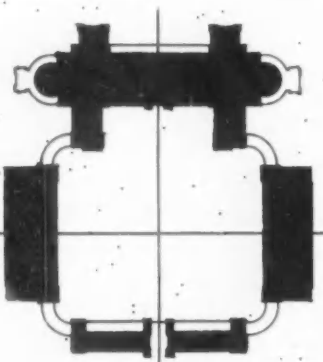
COLLEGE SQUARE, UNIVERSITY OF
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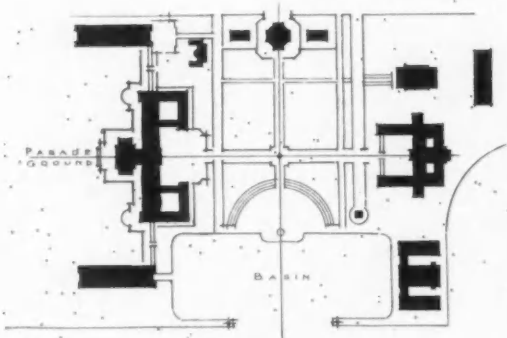
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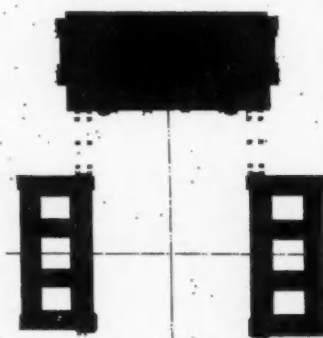
FINE ARTS SQUARE, UNIVERSITY OF
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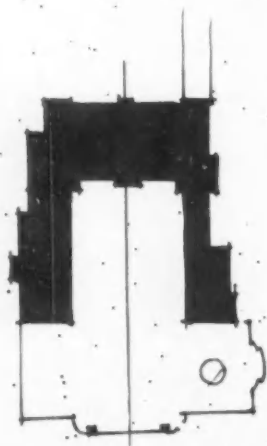
PALAIS D'ENFANCE.



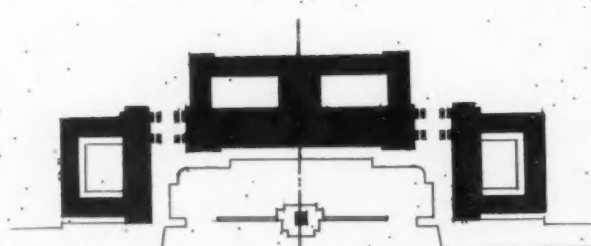
NAVAL ACADEMY, ANNAPOLIS.
Ernest Flagg.



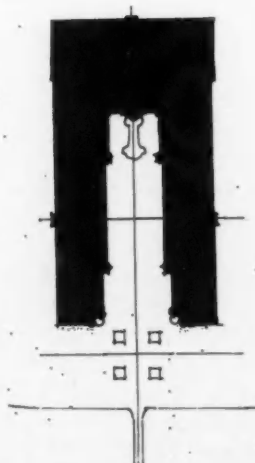
GARE — COURT OF HONOR.



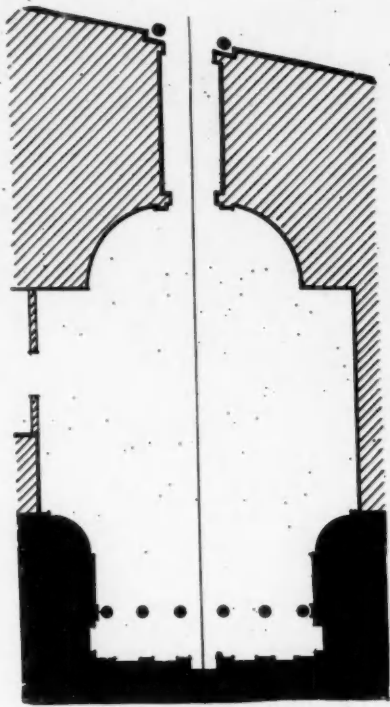
CHATEAU DE ST. CLOUD.



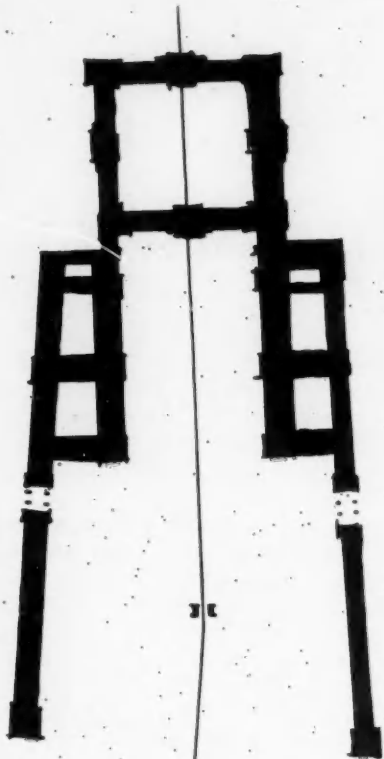
IMPRIMERIE NATIONALE — COURT OF HONOR.
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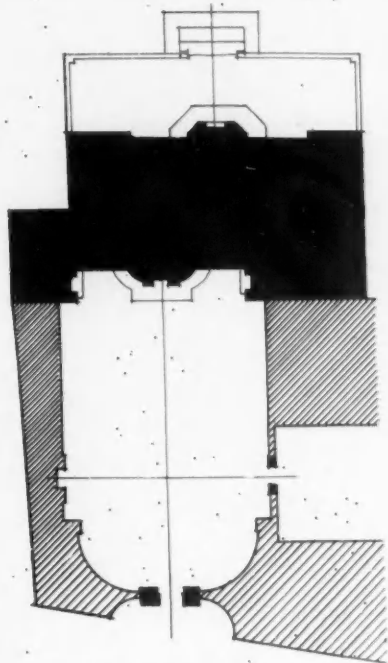
CHAMPS DE MARS, PARIS EXPOSI-
TION OF 1900.



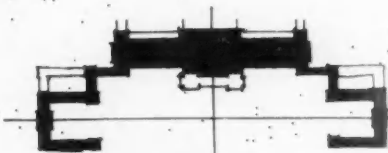
HOTEL DE NOAILLES.



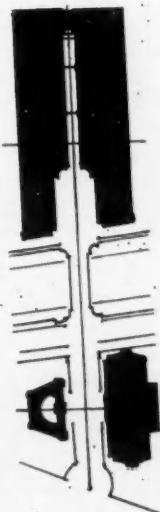
PALAIS DE LOUVRE.



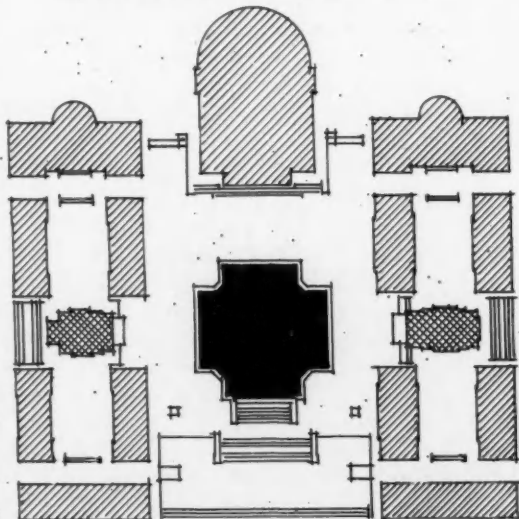
HOTEL DE MATIGNON.



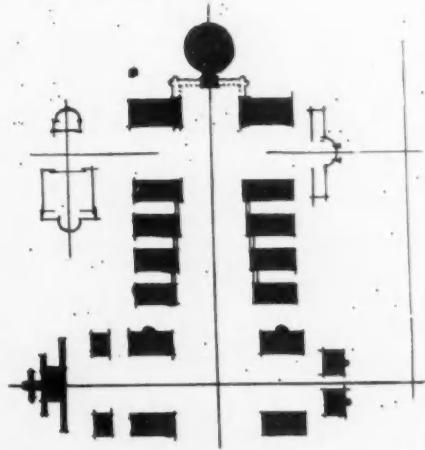
PALACE FOR A CONCLAVE OF MONARCHS.
Bigot.



AVENUE DES INVALIDES.



COLUMBIA UNIVERSITY, NEW YORK.
McKim, Mead & White.



PROJECT FOR UNIVERSITY OF CALIFORNIA.
Howard & Caldwell.

then abhorred, and a court was planned in such manner that from the entrance it could be seen in its entirety. Notice this corner treatment in the courts of Old St. Cloud and the Hotels of Noailles and Matignon.

THE "TELESCOPE."—This principle led to a curious development. Imagine a series of *open courts*, the first intact, the others divided and the halves placed flanking the first, somewhat suggesting the outline of an open telescope. Examples are the Cour du Carrousel of the Louvre or the Place d'Armes of Versailles and the buildings of the Paris Exposition on the Champ de Mars or before the Invalides.

THE "T."—The progression may continue and an *open court* be placed on each side the main axis to form a T, as in M. Bigot's Palace for a Conclave of Monarchs or Mr. Howard's project for the University of California. This forces a secondary axis otherwise quite unnecessary in any court, *closed or open, simple or compound*.

THE CROSS.—Draw together the final courts and add two advancing rings. There results yet another type, the *cross*.

THE AVENUE.—The *avenue* is nothing but a long, narrow *open court*—the Invalides axis of the Paris Exposition for instance. Two avenues at right angles are nothing but the *cross*. Develop the crossing in the way the *telescope* was developed and the composition of the Place de la Concorde is evolved.

THE OPEN AVENUE.—All the foregoing have been symmetrical. There are at least two monumental compositions that are not. Suppose one side of the *avenue* was toward a river or overlooked extensive country. It would be natural not to block this side with buildings; there results the *open avenue*.

THE UNSYMMETRICAL COMPOSITION ON TWO AXES.—Start again with an *open court* square or nearly so; remove one side and replace it with a second *open court*, long and narrow. This is the *unsymmetrical composition on two axes* of the Pittsburg Technical Schools.

THE PYRAMID.—So far each composition named has been grouped around a court or courts of varying shapes. The inner façades of the buildings were the more important and the first to be considered; the exteriors almost "arranged themselves." Suppose a building occupied the central space, naturally the largest or highest building of the group; or, rather, suppose this great building were placed in the center of a simple *open court*, so that from any outside point of view the silhouette of the group massed up toward the center more or less to the form of a pyramid. This is the composition of the Baths of Caracalla—or Columbia University at New York—the *pyramid* it may be called.

THE LINE.—The last composition and perhaps the most simple of all is the *line*. Symmetrical or unsymmetrical, a *silhouette composition* seen from one side only or from both.

Perhaps all *compositions* are in part *line compositions*, for the qualities of each exterior façade are precisely those of the *line*. In general, each type merges into the next. Hybrid types are without number, and some of these we must try to analyze. They are difficult to arrange, but when well composed are singularly interesting.

Reconstruction of the Floors in the Equitable Building Baltimore, Md.

BY CORYDON T. PURDY.

THE reconstruction of the floors in the Equitable Building in Baltimore, after the fire, presented an unusual problem, and the terra cotta arch adopted by Mr. Joseph Evans Sperry, the architect of the building, to meet the requirements, is worthy of special notice.

The building was originally constructed in 1890, and is nine stories high. It has a structural iron frame; but the exterior walls are not supported by it. The columns are made of cast iron and are placed along all wall lines, as well as through the middle of the building, so that they carry the floor at every point, and the walls simply enclose the building.

The floor beams were originally arranged and figured for a Guastavino construction, and the joist beams were figured light, as is ordinarily and properly done with that construction. They were spaced six feet nine inches to eight feet four inches apart, and the girder beams, which were made strong enough for any ordinary short span fireproof construction, including the live loads now required by law, were mostly spaced fifteen feet five inches apart.

The buildings on the opposite side of the street, both ways, were not burned and the walls of the Equitable Building were not much injured. Unlike other buildings, the fire came into this one slowly; but it burned fiercely, and the destruction of the interior was nearly complete. This result was largely due to the way in which the floors had actually been made. A cheap non-fireproof construction was substituted for the Guastavino. It consisted of a five-inch segmental arch of hard terra cotta covered with a two-inch plank floor resting on top of the beams and on the crown of the arch without any filling material in between. This left the bottom of the beams exposed and provided fuel for the flames. Everything that could burn was consumed; the partitions, which were made of a local product called Lime of Tiel, were completely wrecked; in several places heavy safes broke through the segmental arches and fell to the basement; leaving gaping holes above; and everywhere the terra cotta arches were more or less injured.

It was evident at the first examination after the fire that all the interior construction of the building would have to be rebuilt, unless, possibly, the old structural frame might be used over again. In all material respects it was intact. Some of the columns were broken, many of the joist beams were bent and twisted, and quite a number of the girders were in bad shape; but broken columns could be replaced, and fortunately the beams were made of wrought iron instead of steel and could, therefore, be straightened and used again.

The worst feature of the problem of using the old structural frame in the reconstruction of the building was the lack of strength in the joist beams. They were strong enough for the Guastavino construction as originally designed, but the question of cost and other considerations prevented the use of that form of construction. The arch used, however, would have to have the same characteristics, that is to say it would have to distribute

its load to the girder beams as well as to the joist beams.

In addition to this primary requirement it was also necessary,

First, that the weight of the entire construction of the floor, including the beams, the plastering, the filling over the arch and the floor finish, should not be more than ninety pounds.

Second, that the ceiling in each story should be level and unbroken, except by the girders.

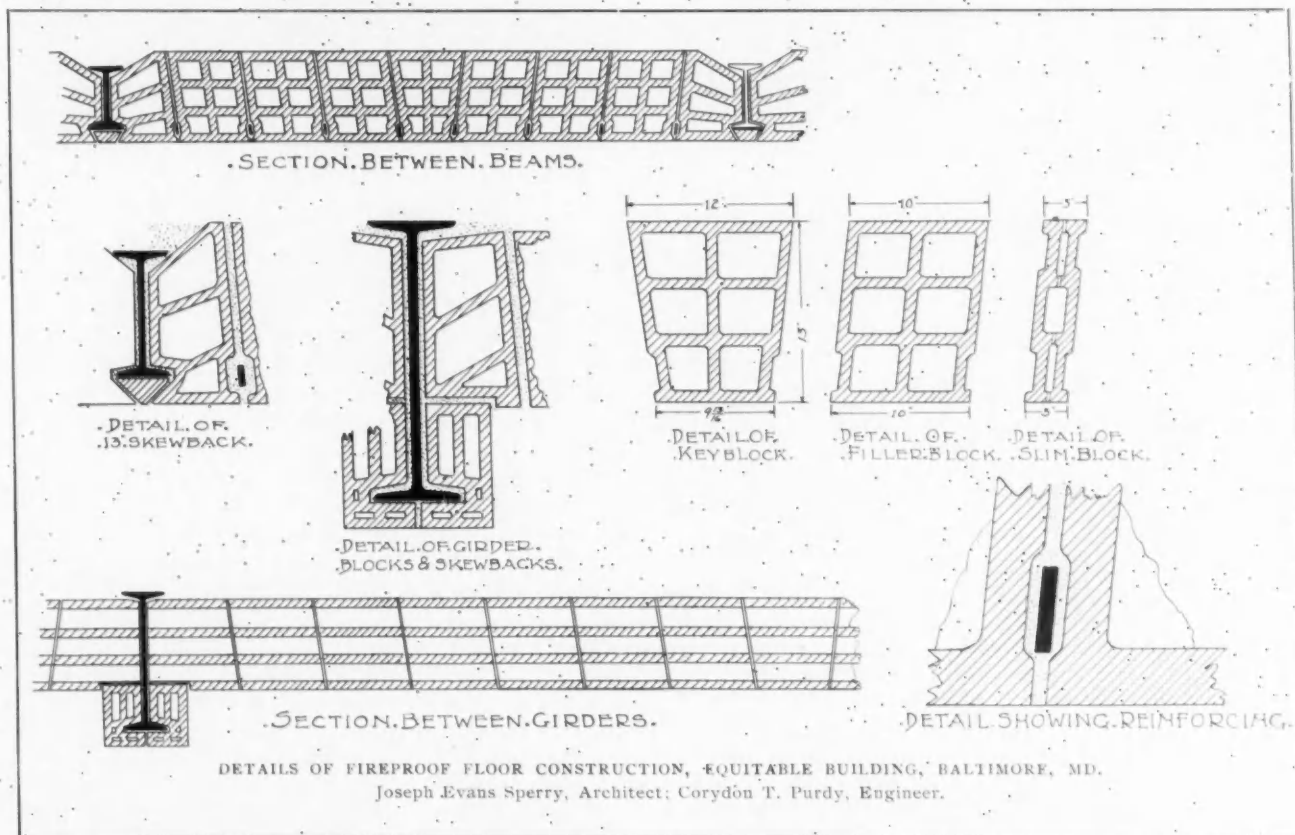
Third, that the fireproofing quality of the construction, as a whole, should be unquestionable; and

Fourth, that the projection of the girders below the ceiling line should be covered particularly well.

bottom of the beams is fully provided for. It will also be noticed that the blocks are made to arch both between the beams and between the girders—side construction in the former case and end construction in the latter.

As finally constructed the end blocks adjoining the girders were turned the other way, so that these pieces were made as ordinary skew backs. The size of the blocks was then modified to meet this change and to satisfy the varying widths between the joist beams. The forms of these blocks, as actually constructed, are shown in the illustration.

The specifications required that the girder blocks covering the projection of the girder beams below the ceiling should all be anchored together under the beams with



At first it was thought that all these conditions could be met with reinforced concrete construction; but every form of such construction occasioned a greater weight for the floor than the ninety pounds, and if a form sufficiently light in weight could have been devised it would have required a hanging ceiling, which was objected to.

The plan finally adopted provided for a flat semiporous terra cotta arch thirteen inches in depth. The general scheme of this arch as proposed is shown in the illustration. It will be noticed that it extends two inches below the joist beams, and that the girder cover extends two inches below the girder; thus the fireproofing of the

iron staples. With this tying together of the blocks and the notched arrangement of the skew backs, the permanency of the construction, even under the worst conditions, seemed to be assured. In fact, after the covering is once constructed it must be broken to pieces before it can be taken off.

The total weight of this arch, with the wood finish, the cinder concrete filling, the plastering and the beams, just came within the ninety pounds limit. In all other respects it was equally acceptable. It was also the most economical plan considered. It served as an excellent illustration of what can be done with reinforced terra cotta.

Suggestions for Architectural Travel in Spain.

BY L. MORRIS LEISNER.

TO a lover of the arts Spain presents so much of richness and color, of variety and contrast, of the exquisitely refined and of the ruggedly picturesque, that it is difficult to account for the comparative lack of interest shown in her by the student world. Of late years architects have shown her more appreciation, but it is still undoubtedly true that the great majority of student travelers do not cross her borders. This may be due in a measure to her own attitude, for she has proudly held aloof from modern innovation and change, requiring the traveler to do as the Spaniards do, and rather rubbing in the fact that he is in Spain and not at home. The way of the traveler is hard here, and even Baedeker grows pessimistic once he is south of the Pyrenees and habitually looks on the dark side. But to the enthusiastic student a few inconveniences met and cherished comforts left behind only add spice to his experiences, especially in a



SAN ESTEBAN, SALAMANCA.
Note square tower at crossing. Peculiar to this locality.

country which will give so much in return for her petty shortcomings as grand-old Spain.

For as well as what may be called "modern architecture" she offers for study strata of the civilization of ages. Before history began, her native Iberian stock, which seems to have sprung from the soil itself, was given a touch of the North by the wandering Celts. The Phœnicians and Carthaginians gave the first impulse to her civilization, and the Romans, after the fierce Punic wars, established their beneficent rule for four hundred years of fruitful peace. It was then that Spain's architecture began. The Goths and Vandals worked three centuries of destruction and feeble imitation of the arts of their predecessors before the Moors blazed their path from south to north and held themselves on the peninsula by continual warfare for seven centuries. During these years they developed a civilization which stands as one of the first the world has produced, and which has left this ultra-Christian country a heritage of art and tradition which shows itself in all forms of her life to-day.

Coincident with the final overthrow of the Moors the Catholic kings opened the possibilities for a new

NOTE.—The author wishes to acknowledge his indebtedness to his traveling companion, Mr. Frederick Reed, for the use of a number of the illustrations in these articles.

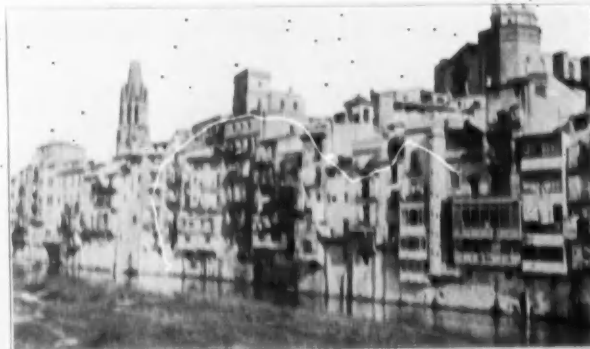


WHITEWASHED SEVILLE.

civilization when through Columbus they discovered our world. Immediately riches poured in and Spain found herself, under the first rulers of the Austrian line, the mistress of two continents. She was thus placed in a position so entirely analogous to our own recent past, that we must feel a thrill of sympathy for her sufferings from the pangs and penalties of the *nouveau riche*. Like us, after years of privation and warfare during which she had not time to look to her arts, she found herself in immediate need of an architecture rich enough for her new station in life.

Up to this time she had produced only a few nobly simple Romanesque and Gothic churches. These styles at once assumed a more elaborate character. Moriscos were set to work for their Christian masters and the Quattrocento was transplanted from Italy. From this time on the development of the Renaissance took much the same course as in Italy, the rich fancy of the Plateresque and Grottesque styles dying down to the correct precision of the Cinquecento, and the coldness of this style meeting violent protest in the florid Rococo, which in turn dwindled to commonplaces in the eighteenth century.

The crime of Spain, according to the critics, is her



GERONA, ON THE ONA.

failure to have developed and carried to a logical conclusion any style which may be strictly called Spanish. It is difficult to grasp the exact point of this, for eliminating from consideration the wonderful art of the Saracens, that child of nomad African parents that was born and raised in Spain, we find here types to be seen



CHURCH OF SANTA CATALINA, SEVILLE.



A PATIO, RONDA.



A PATIO, RONDA.



TOLEDO, THE CATHEDRAL SPIRE FROM THE ROOFS.

in no other country. Also in her adoption of foreign styles Spain has masterfully adapted them and given each a distinct Spanish character. She has also shown particular skill in developing the allied arts, such as wrought and chiseled iron and brass; sculpture in wood, generally colored or gilded; encaustic and enameled tiles; tooled leather and beautiful armor.

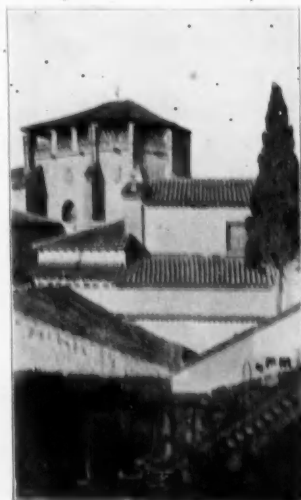
It was her sudden fall from power and internal decay under the Inquisition which paralyzed her architectural progress, rather than a dearth of imagination and creative power in her artists. A country cannot be called barren of these qualities which produced a Berruguete; a Diego de Siloe, a Valdelvira, and a Montañes, who worked in the free spirit of the early Renaissance, or a Herrera, who could as cleverly articulate the dry bones of the Cinquecento as any of his Italian *confrères*.

So while Italian, French and even German influence is seen in plenty, it is influence only, and the results answer the requirements of Spanish climate and customs.

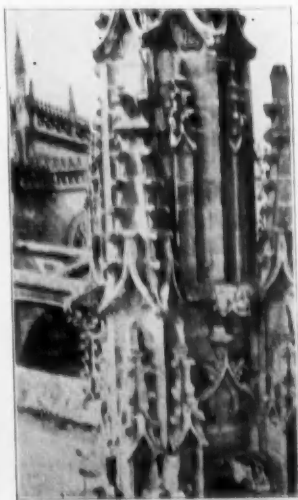
Now, when one has said "Spanish climate and customs" he has in no wise committed himself, for from the

mountainous North of Aragon and Catalonia to the gentle slopes and plains of Andalusia is a long cry in manners, customs and language even. "*Quien dice España dice todo*" (who says Spain says all) is believed by the Spaniard to be entirely true, but true of *his* Spain, *his* province. He turns a cold shoulder to his brothers living across the mountain ranges which almost invariably separate one Spain from another, knowing little and caring less of what is doing a day's journey from his own hearthstone. His true national character shows itself only in his sturdy championship of that Quixotic ideal, "*¡Honora España!*" which it is the business of the government to look out for. As the country's configuration has placed him in a little corner hard to get out from, he calmly develops his individuality, living with all his might, in grace, dignity and peace, leaving reforms for to-morrow and dreaming of the glorious past. It is the contrasts so developed which make one's impressions here so keen and incisive and give such spice and flavor to his experiences.

That man who loves the study of his fellows as well as



CHURCH AT SALAMANCA. Note pierced work under roof.



GOTHIC DETAILS FROM THE ROOF OF THE CATHEDRAL, SEVILLE.



IN THE JARDIN DEL PRINCIPE, ARANJUEZ.



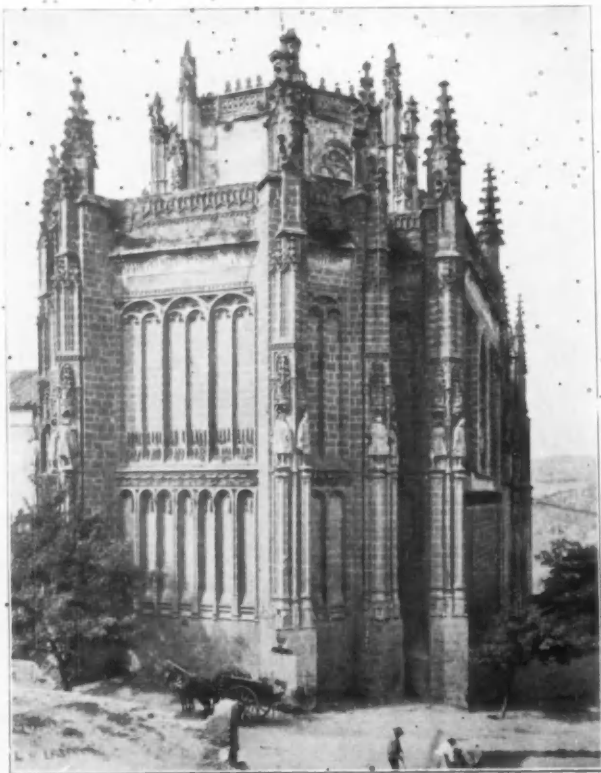
CONVENT DE SANTA PAULA, SEVILLE.



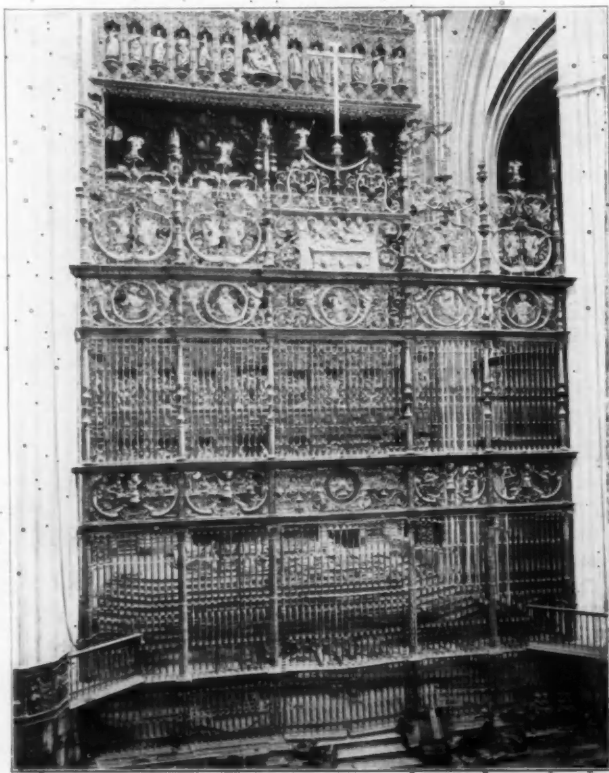
THE GENERALIFE FROM THE MEZQUITA, ALHAMBRA



CASA CABELLO, CORDOBA.
Example of the large doorways leading to the Patios.



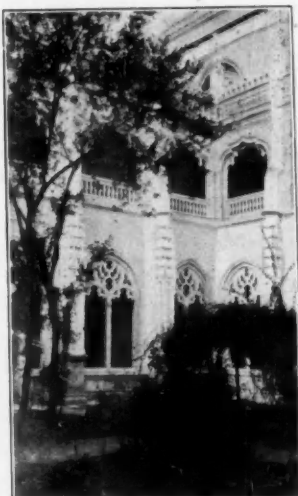
THE APSE, SAN JUAN DE LOS REYES, TOLEDO.



SCREEN, CATHEDRAL AT GRANADA.



COURT OF THE IRISH COLLEGE, SALAMANCA.



CLOISTER, SAN JUAN DE LOS REYES, TOLEDO.



ON THE TOLEDO BRIDGE, MADRID.



SAN GREGORIO, VALLADOLID. RENAISSANCE INFLUENCED BY MOORISH AND GOTHIC.

of the arts, will find in Spain a joy forever. For here he finds the most picturesque of countries to be architecturally thoroughly worth while; giving him the excuse, so to speak, of lingering to study, while becoming acquainted with ideals so different from his own. The dress of the peasantry, their implements, water jars, blankets, *alforjas* or saddlebags, *botas* or wine flasks, snuffboxes and even the hair on the donkeys' backs, show charming decorative forms. These with the festivals, fairs, dances, games, and bullfights of the people will appeal strongly to an artistic nature.

As it is the purpose of this article to aid the prospective traveler, the following hints will be given in as few words as possible, though it is difficult to adopt a guidebook manner in writing of Spain.

It will be advantageous to look over the following books before making out the itinerary, further suggestions for which are given later:

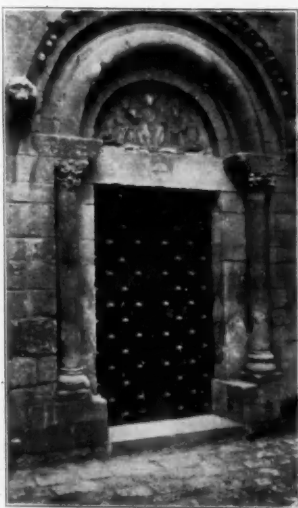
Technical: "Monumentos Arquitectonicos de España," published by the Spanish government. Prentiss, "Renaissance Architecture in Spain"; Street, "Gothic

Architecture in Spain"; Fletcher, "History of Architecture"; frontispieces in *THE BRICKBUILDER* for some years back, and that part of the larger architectural histories devoted to Spain.

General: Hale, "Story of Spain," "Seven Cities of Spain"; Hay, "Castilian Days"; D'Amicis, "Spain and the Spaniards"; Irving, "Sketch Book" and "The Alhambra"; Jennings, "Tourist in Spain, 1835-38"; Calvert, "Impressions of Spain," "The Alhambra," "Moorish Remains in Spain"; Junghaendel and Garrett, "Die Baukunst Spaniens"; Villa-Amil, "España Artística y Monumental"; Waring, "Architectural Studies in Burgos"; Waring and Macquoid, "Examples of Architectural Art in Italy and Spain"; Wyatt, "An Architect's Notebook in Spain." Historical novels: Crawford, "In the Palace of the King"; Roulet, "God the King, My Brother."

Both Baedeker's and Ford's (Murray's) are excellent handbooks. Baedeker's is the more concise and up-to-date. Ford's is the best for the sportsman and general traveler.

The best time for travel is in the spring and fall. The



DOORWAY, CHURCH OF SAN PABLO, BARCELONA.



A TYPICAL DOORWAY IN AVILA.



A DOORWAY, AVILA.



A BALCONY, SALAMANCA.

ideal trip as regards time of year and pleasurable incident would be to start from Gibraltar about the middle of March and allowing, say two months for the trip, to arrive in the northern mountains as the heat of summer becomes oppressive. If one travels necessarily in the autumn or with a desire to follow the course of architectural development which was in general from north to south he should start from Port-Bou or Irun about the middle of August and reach Granada any time during October, while there is still fruit in plenty and the days are sunny and warm. Travel in the winter, north of Andalusia, is almost impossible for one used to a warmed house, as no arrangements are made for heating. It is possible, however, to travel through the summer months, if one is careful to avoid a sequence of midday sun and vaultlike church. Suggestions follow for trips of one, two and three months' duration.

ONE MONTH.

Ronda.....	1 day	Avila.....	1 day
Granada.....	3 "	Salamanca.....	3 "
Seville.....	3 "	Valladolid.....	1 "
Cordova.....	1 "	Burgos.....	3 "
Madrid.....	2 "	Saragossa.....	1 "
Toledo.....	2 "	Tarragona.....	1 "
Segovia.....	1 "	Barcelona.....	1 "
Escorial.....	1 "		

Time allowed for actual travel $7\frac{1}{2}$ days.

TWO MONTHS.

Ronda.....	1 day	Escorial.....	1 day
Granada.....	6 "	Avila.....	2 "
Seville.....	6 "	Salamanca.....	6 "
(Seville to Cadiz by boat.)		Valladolid.....	1 "
Cadiz.....	1 "	Burgos.....	3 "
Jerez.....	3 "	Trip to Silos.....	2 "
Cordova.....	3 "	Saragossa.....	2 "
Madrid.....	3 "	Lerida.....	1 "
Aranjuez.....	3 "	Poblet.....	1 "
Toledo.....	5 "	Tarragona.....	2 "
Segovia.....	2 "	Barcelona.....	2 "
		Gerona.....	$\frac{1}{2}$ "

10½ days' actual travel.

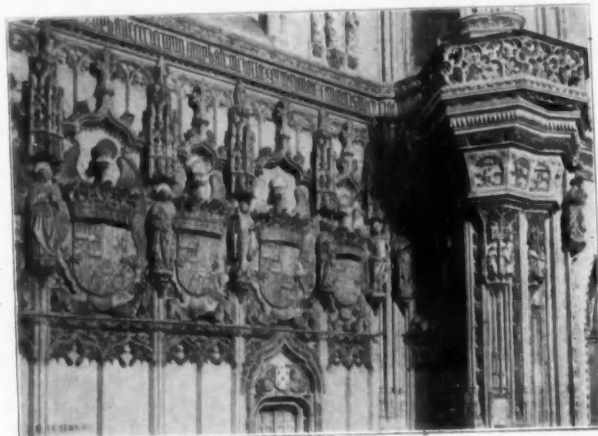
THREE MONTHS.

Ronda.....	1 day	Avila.....	2 days
Granada.....	7 "	Escorial.....	1 "
Cordova.....	5 "	Madrid.....	5 "
Seville.....	7 "	Aranjuez.....	1 "
Jerez.....	1 "	Toledo.....	6 "
Cadiz.....	1 "	Alcala de Henares.....	1 "
(Cadiz to Lisbon by boat.)		Guadajara.....	1 "
Lisbon.....	3 "	Segovia.....	2 "
(Including excursions to Belem and Cintra.)		La Granja.....	1 "
Alcobaca.....	4 "	Valladolid.....	1 "
Batalha.....	1 "	Palencia.....	1 "
Thomar.....	1 "	Burgos.....	5 "
Coimbra.....	3 "	Trip to Silos.....	2 "
Santiago-de-Compostella.....	3 "	Trip to Saragossa with stops.....	2 "
Leon.....	2 "	Saragossa.....	3 "
Zamora.....	1 "	Lerida.....	1 "
Salamanca.....	6 "	Poblet.....	1 "
Medina del Campo.....	1 "	Tarragona.....	2 "
		Barcelona.....	3 "
		Gerona.....	$\frac{1}{2}$ "

14 days' actual travel.

This may be extended to include a trip to the Balearic Isles; sailing from and returning to Barcelona in three days and four nights, or one may return via Alicante, from whence picturesque Murcia may be visited and Barcelona regained via Valencia and the east coast towns which are not particularly valuable to the architect.

LANGUAGE. — It is misleading to say that a knowledge of the language is not necessary. One can speak English and pay two prices, or French and fare not much better. If he ventures at all from the beaten track he will be at a loss with either. But it is reassuring to consider how very little Spanish he may know and still make his way. A few phrases gleaned from a phrase book or dictionary or from endeavors to read the *Correspondencia Española* (the principal newspaper) will, with persistency and a pleasant manner, almost invariably see one through.



SHOWING THE SPANISH FEELING FOR DECORATIVE TREATMENT, AT ITS HEIGHT.

*METHOD OF TRAVEL. — One traveling for experience may find tramping, bicycling, etc., pleasant, but the student with limited time had best rely on the prosaic train. He will find, in the natural course of things, short trips to be made in diligences, muleback or on foot which will break the monotony of railroading. If one can afford to travel first class he had best do so. This will give the privilege, at a considerable advance in price over the regular first-class fare, of traveling by the *trains de luxe*, which are about twice as fast as the regular trains. The expense of this sort of travel is, however, formidable to the average student. Any well-bred person may very enjoyably travel third class if he is willing to offer, as well as accept, the somewhat elaborate courtesy of the Spanish peasant; to treat all men as his equal and use his rain coat for a seat cushion. Certain unpleasant habits of the Spaniards are found in all classes, while their many ingratiating ones are found most strongly evidenced in the sturdy, dignified and courteous man of the people. The second class may be left unspoken of as one gains no advantage in point of time over the third (the fast trains carrying first class only) and in addition has stuffy cushions and the most uninteresting and boorish type of travelers.

At the first large city (as at Granada on the south or

* See "A Tramp in Spain," Bart Kennedy; "In Northern Spain" (Tramping and Camping); Gadow; "Sketches Awheel in Modern Iberia," F. B. and W. H. Workman; description of a tour on horseback (page 12), Murray's Handbook for Spain.

Barcelona on the north) one should apply during his first day for a *billete por kilometros* or mileage ticket, good on all railroads in Spain. He should first consult the *Guia Oficial de los Ferro-Carriles*, or general railroad guide, to decide the distance (in kilometers) he will probably travel. For the one-month trip given here it will take about three thousand kilometers, for the three-



FINIAL OVER DOORWAY, TOLEDO.

months trip about four thousand. (They cannot be used in Portugal.) This is a most excellent method of securing transportation, saving at least forty per cent and being (unlike circular tickets) always available to go anywhere within the time limit. They are sold for from eighteen hundred kilometers good for three months to twelve thousand kilometers good for fifteen months. One's photograph, about two and one-half inches square, must be presented with the application, for identification. It takes five or six days to get the ticket. The holder presents this at the ticket offices en route, receiving a ticket for the detached number of kilometers.

In traveling by boat one should go first class and should previously inquire whether anything to eat may be had on board. Pleasant trips of this kind may be made from Gibraltar to Cadiz and Lisbon; between



OUTLOOK FROM SEGOVIA, TEMPLAR CHURCH IN THE MIDDLE DISTANCE.

Cadiz and Seville on the Guadalquivir; from Barcelona to Palma, Majorca and so on.

Diligences are seldom needed except to reach the towns from the usually isolated railway stations. Some trips, however, must be made by them; as to La Granja from Segovia and to the monastery at Silos from Burgos. This last, for which the guidebooks give directions, is a journey both by diligence and on mules which should not be missed if time can be spared to it. If the weather is good the outside seats are always sought for.

(This article will be concluded in the October issue.)

The Relation Between English and American Domestic Architecture.

BY FRANK CHOUTEAU BROWN.

THE ESSENCE OF MODERNITY.

THE more definite of the qualities and characteristics that go to make up the modern English type of residence architecture have already been considered. The influences exerted by architectural styles derived from historic precedents existing in England, as well as those emanating directly from the material employed, have been taken up at length. Except in the larger or more monumental modern buildings (Fig. 1), the suggestion of an historic style is never given in such a way as to become formal or insistent; and therefore even with the most modest structures it cannot appear pretentious or overpowering. Indeed it may be said that the third most important characteristic of English domestic architecture is its unpretentiousness, its *naïveté*, its quiet domesticity of effect.

Several things may be deduced from a study of the various examples of this modern type. They uniformly avoid the use of conventional architectural forms and moldings, as well as any fixed formality in the balance of façade or use of material. To take as an instance Mr. Macartney's house in Sussex (Fig. 2), it will be noticed at once that no conventional cornice is used upon the building. At one end is a simple coved molding with small iron brackets carrying the detached gutter, while in another place the eaves are formed by the projecting rafters alone. Where the roof projects over the face walls of the gable there is no elaborate raking cornice or set of moldings, but the slates lap over and the roof is finished in the simplest, most "cottagey" manner. Again, the stonework of the wall surfaces is treated in a great variety of ways: at one place a fairly conventional ashlar; at another the method of laying is less exact and more broken up; while in the first story wall, beside the doorway, rough courses of all kinds of stone are employed, and in the return from the gable face the roughest kind of ashlar treatment is utilized along with some brickwork that repeats the material used in the exterior corner angles of the walls. The only moldings that appear in the entire design are along the top of the simple entrance-door opening, which is thus quietly emphasized and accented. See how closely these modern walls resemble the stonework in the walls of the old house at Lincoln (Fig. 3), where the growths of moss and lichen in the crevices are responsible for the principal differences of aspect between them.

Mr. Brierley's "The Close" (Fig. 4) is slightly more architectural in effect, though still sufficiently picturesque and informal in composition to be classed in the same group as the other dwelling. The difference results somewhat from the severe simplicity of plan and the additional historic suggestiveness of the material (brick) and, in part, from the treatment of the finish upon the top of the gable walls, which more closely suggests Elizabethan precedent.

But, beside the qualities already enumerated, there are a great many modern country dwellings where the charm depends upon something less tangible than is indicated

by the term "historic style." Perhaps it would be more illustrative to say that in some of this modern work has been reproduced the quality of "picturesqueness," which, in essence, forms so much of the charm of many an old house. This picturesqueness is most elusive and impalpable in result; its spirit is so fleeting and evanescent, so variable, that it is only possible to say that, in part, it depends largely upon composition; the grouping of plain and different textured wall surfaces, gables and dormers; of windows, projecting and recessed wall planes and chimney tops; but above all, its *effect* must be informal and unstudied. The new composition must reproduce the atmosphere of old groupings obtained naturally by the changes, alterations and additions made by generation after generation of owners.

The work of one architect, Mr. Lutyens, is consistently picturesque time after time. Stone seems his favorite material, and in such rambling country houses as "Orchards" and Fulbrook House (Figs. 5 and 6) he has evidently closely suited his treatment to his material, adapting both from local existing buildings belonging to the less formal historic periods.

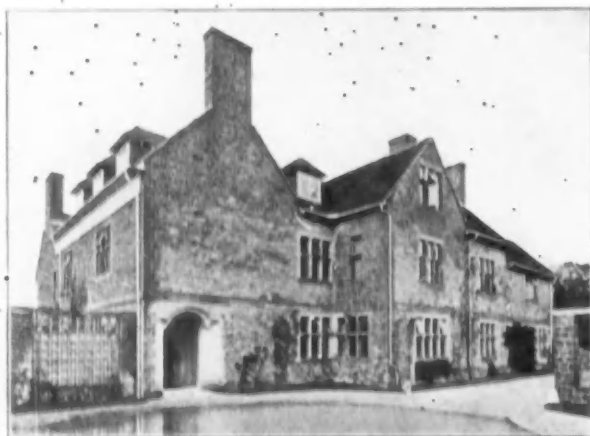


FIG. 2. ENTRANCE FRONT, "MINSTED," SUSSEX.
Mervyn Macartney, Architect.

The elusive element of the picturesque is not alone the birthright of the English architectural designer, as the bold plastered gable flanking the crisp-angled chimney, the stretch of dormer-broken, penthouse roof with pointed-timbered gables, and the stone-terraced walks of the house reared against the sky across the little rough-grown American garden (Fig. 7) offer ample evidence. The element of the picturesque lurks ever rather in the minute than in the composition of a grander scale, and here, in such another engaging grouping as that of buttressed entrance and indrawn chimney, of gable, bay and latticed casement (Fig. 8), is a bit of more modest, less assertive proof. This is what is called — for want of a better term — "picturesque." Such compositions as these must have been felt for and built up in perspective study before the different elements were coldly placed and figured in elevation and in plan.

After the style; after the careful selection of material and its perfect fitness to its method of use ("technique") and to the locality where it is employed, after the nice adaptation of the technical possibilities of the material and the employment of all those refinements native to it,



FIG. 1. PUBLIC LIBRARY, KINGSTON-ON-THAMES.
Alfred Cox, Architect.

perhaps the greatest attribute of this modern work in England is the extreme art to which the architectural designers of that country have attained in the pleasing, unartificial employment of motif and material, and their composition into masses of happily contrasting texture, color and form. Through some subtle and intuitive process they have succeeded in stepping outside the bounds of stiff architectural restraint that so often hold the designer in bondage. There is an informality of effect, the result of a higher art, that makes each structure an intimate and personal expression of the problem presented by that individual dwelling. This problem is approached directly, solved simply, and treated with refinement through all its working out. The result is that these dwellings present an aspect of unconscious "homeliness," in the true meaning of the word, that is rarely experienced in the dwellings of any other country.



FIG. 3. OLD STONE HOUSE BACK OF CATHEDRAL, LINCOLN.

It is true that architectural style *must* be evolved from historical precedents that are both native and natural to it, and that it is almost impossible to find an English dwelling or manor house of any age at all that does not contain much of this "homely" feeling. But the inevitability of this result should not detract from the credit to



FIG. 4. GARDEN FRONT, "THE CLOSE," BROMPTON.
Walter H. Brierly, Architect.

be given to those individuals who have to-day succeeded in reproducing this effect so consistently and continuously as is done by the best younger English architects. It may be that it is this feeling that creates the atmosphere that makes all England so attractive to the traveler.

Undoubtedly a great deal of the effect of English domestic architecture must be attributed to the customary surroundings of the ordinary English dwellings, — surroundings that are unusual and rarely found in America; for no English residence, however humble, is considered complete until its proper accessories of shrubbery and garden have been perfected and developed. But even where such accessories are impossible, as in a house abutting directly on the street, the designer so consistently reproduces the atmosphere of many composite old dwellings, or so unconsciously interprets the conditions imposed by his materials, that the building itself possesses a sense of absolute fitness to its location.

An attempt to define the exact constitution of this type of dwelling may be suggestive and help in clarifying the problem for the individual student. Using the terms "Classic" and "Gothic" in the somewhat arbitrary though broad application already alluded to, the one being intended to refer to the balanced plan and composition of the buildings of the English Renaissance,



FIG. 5. SOUTH TERRACE, "THE ORCHARDS," SURREY.
E. L. Lutyens, Architect.

and the other to the more subtle, irregular, unbalanced treatment of dwellings, in both plan and elevation, that was a survival of the period of Gothic supremacy in architecture, it may be possible to arrive at a point of view that will be understandable both to the writer and to the reader. "Classic" architecture is easily definable and reduced to a comprehensible set of rules, while "Gothic" architecture admits of no such exact definition, being rather the individual crystallizations of a constantly varying form and spirit than the reproduction and composition of a well-understood series of architectural motives. Taking these meanings, therefore, it might be possible to define the trend of modern British architectural practice by saying briefly that it consists of the use of Classic detail in combination with Gothic forms, feeling and composition. A supplementary definition might be made that would apparently state just the reverse of this, but in the end the meaning is nearly the same; and in the nice merging of these two styles lies, as it seems to the writer, the success or failure of modern English architecture. Often the combined features are both Classic and Gothic, and sometimes, as has been



FIG. 6. SOUTH FRONT, FULBROOK HOUSE, SURREY.
E. L. Lutyens, Architect.

intimated, an individual instance may be found where it would be more appropriate to say that Gothic detail or features have been used after a Classic fashion, but the first statement would seem to more invariably apply, and this latter one may be confined rather to individual and exceptional instances.

But after all, the dominating, underlying feeling that makes itself apparent through all this work, the feeling that alone succeeds in blending together the two architectural styles hitherto considered as most antagonistic, is the modernity of treatment that is *always* present in greater or less degree. It is this feeling — and although its effect is noticeable and easily recognized, it is itself so intangible that it is impossible to definitely seize upon and analyze its characteristics, — that it is necessary for the American designer to assimilate and to intuitively comprehend before he can even begin to apply its principles in practice to the different series of localized problems that constantly confront him. For the spirit and essence of modernity, where it can be discerned and reapplied to our own problems, is ours by right as a con-



FIG. 7. HOUSE, CINCINNATI, OHIO.
Edwin J. Lewis, Jr., Architect.

temporary; and this characteristic may be used in precisely the way the English themselves are using it, as a reason to allow of the incorporation and adaptation of Elizabethan or other historical motives into our modern architectural problems.

The type of architecture which has reached a distinctive and typically modern development in such dwellings as have been grouped together in villages like Port Sunlight, Leigh and Bournville, while apparently blossoming suddenly, was yet of slow and gradual development. As evidence of this we find many of the individual fea-

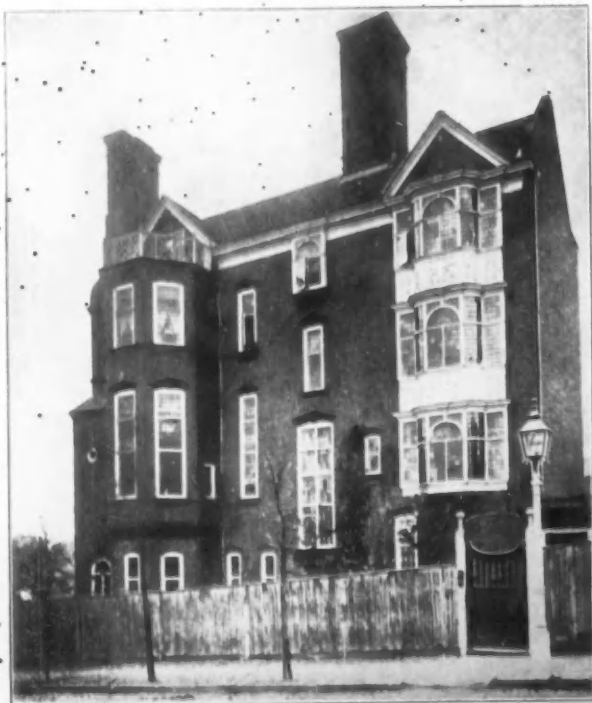


FIG. 9. A HOUSE IN LONDON.
Norman Shaw, Architect.

tures, distinctive and typical of most of the up-to-date modern work, in dwellings now regarded—by comparison—as old-fashioned. The group of houses that follow, for instance, all designed by Mr. Norman Shaw, have a certain historic and sequential interest in representing the process of evolution through which English design passed in attaining its present definite type of residence architecture. All include some portions that are evident survivals of the routine engendered by the previous uninteresting architectural decade. In some ways they still appear uncouth in composition and not wholly satisfying in proportion; some details are unnecessarily ugly or meaningless; some moldings unstudied, commonplace and unornamental; while several betray a certain effect of awkwardness from an evident lack of ease in combining what must have then seemed somewhat incongruous elements. Yet it is now possible



FIG. 8. ENTRANCE MOTIVE, HOUSE, WARWICK, R. I.
F. Manton Wakefield, Architect.

to realize how far they were in advance of their time, and how clearly they shadow forth the essential traits—even some of the mannerisms—of the architecture that was to succeed them.

The first (Fig. 9) represents a problem that has not yet proved wholly amenable to the formulae championed by the modern English practitioner. Indeed this particular example is as good, if not better, than many city dwellings that are being erected in London to-day. Of the two bays one seems a little too archaic in ornament and fussy in molding; and the other (all the more so by contrast) somewhat awkward and uncouth, which is further emphasized by the lack of unity between its finish at the top and its relation to the gable, wall and roof behind it, to which it is somewhat ungraciously attached.

The composition is yet sufficiently interesting to hold the attention, and by simplifying the molded members and making their scale more appropriate to the brick window caps, giving the brick bay less projection and a dif-



FIG. 10. DOUBLE HOUSES, BEDFORD PARK.
Norman Shaw, Architect.

ferent crowning finish; this composition would compare favorably with the English town house of most modern design.

The suburban dwelling was then, as now, more certainly and successfully soluble. The two cottages in Bedford Park (Fig. 10) may reveal a certain still apparent awkwardness, but those in Richmond Terrace (Fig. 11) are excellently treated with bays, dormers and chimney tops quite thoroughly typical. The one in the immediate foreground, running off the picture, shows the use of two materials, brick and tiles (or slate), for different sections of wall surfaces, to which attention has already been called. The bays here are excellently treated. The second story windows are a little crude and clumsy, the dormer much better in scale than the preceding examples, and the fronts and chimney tops quite thoroughly typical. The cottage beyond shows the use of a motive triply repeated (this later becoming a favorite trick of the modern school, as may afterwards be noted). The window employed on the side return of



FIG. 11. TWO COTTAGES, RICHMOND TERRACE.
Norman Shaw, Architect.



FIG. 12. HOUSE, BEDFORD PARK.
Norman Shaw, Architect.

these dormers is ungraceful. (Later we will see how, by placing the corner window on the angle and leaving the gable dormer treatment just as it is here, the English have obtained a more natural and pleasant design.) The first story bay is quite as successful as those on the other house, but the doorway hood still possesses the faults already mentioned in the house hoods of Bedford Park. The arches over the window openings on the side are too high and heavy, while the whole composition is just a



FIG. 13. THE INN, BEDFORD PARK.
Norman Shaw, Architect.

little bit fixed and inflexible. The other illustrates the triple repetition of a motive, — a favorite trick of the modern school — repeated in the larger Bedford Park house (Fig. 12), where it is accented by the three bays immediately below the gables, and combines dormers and bays quite as successfully as on the nearer house. The clumsy windows, the crude dormers of the one cottage, and the awkward doorway hood of the other are obvious defects, while both compositions are a trifle too

fixed and inflexible.

The Inn at Bedford Park (Fig. 13) is perhaps the most interesting composition of the group. Its bulging front windows are precisely like those in a few old surviving fronts around London and throughout England. The gable is repeated with monotonous regularity, but the wall surfaces have been nicely broken by the varied uses of plaster, brick and tile; and the door hood is an improvement over both the examples criticised.

Although this group of dwellings will lose by comparison with more recent English work, still, judged on their own merits, it must be confessed that, though not wholly successful, they still possess considerable charm and ease of treatment; while occupying the position they do midway between the old school and the new, with the new influences still awkward and uncertain of expression, they well deserve a place in any record of the progress and development of the new Renaissance in English domestic architecture.

Editorial Comment and Selected Miscellany

SALARIED GOVERNMENT ARCHITECTS.

THE discussion in the International Congress on the execution of important government and municipal architectural work by salaried officials, appears to have touched a sore spot, judging by the earnest protests which were voiced against this species of architectural patronage. It was summed up that there were two good reasons against the giving of important municipal work to salaried officials, namely, it was neither for the good of the administration nor for the good of the public. We are in such a state of transition in this country that it is too early yet to see how our government buildings can best be designed and built, having in view all the difficulties and application of politics, which cannot be ignored. Apparently none of the speakers at the Congress were in favor of having work done by salaried architects. Every objection was raised, and the most convincing arguments were put forth to show that it was hopeless to expect any good out of a government employee, and yet we fancy that there is another side to the question which would come home very closely to many an architect who has been worked to the very verge of distraction by a large practice, and who has seen his opportunities only half elaborated, simply from lack of time



GUNTHER BUILDING, BALTIMORE, MD.
Simonson & Piesch, Architects.
Brick furnished by Ironclay Brick Company.



CORBEL, EXECUTED BY SOUTH AMBOY
TERRA COTTA COMPANY.

and money. There is a very strong feeling that architects should always be on salary when employed upon a large building; that the percentage system of payment is fundamentally wrong, in that the harder a man works to secure an economical result, the less money he gets; and that if a

man were sure of a fixed salary, even though it might be a small one, he would be freer to devote himself to the artistic solution of the problem before him. Also it is reasonable to assume that the architect who has once solved properly a municipal or government problem is better qualified to do it



TENNESSEE TRUST BUILDING,
MEMPHIS, TENN.

Shaw & Pfeil, Architects.
Brick furnished by Hydraulic-Pressed Brick Co.
again than any beginner, however talented.

The real objection to government salaried architects which we experience in this country was not touched upon at all by the Congress, namely, the utter hopelessness of keeping the offices out of politics. That is the reason why we have had such poor success with government designed buildings up to a few years ago. The fact that our present government architect at Washington is so conspicuously successful in his art simply emphasizes the difficulties which preceding administrations experienced.

OPPORTUNITY.

THE September *Century* magazine had a number of drawings by Joseph Pennell of the French Cathedrals. It also had sketch plans and illustrations of two lodges, to be built at a cost of about \$1,000. It furthermore printed a very brief but comprehensive article by Benjamin Ide Wheeler on the Rebuilding of San Francisco. This made three distinctly architectural features in a single number of a popular magazine, all of which goes to show that architecture is rapidly becoming one of the foremost attractions for the people, and that we are as a nation, becoming great builders.

Architecture, as a profession, presents such fascinating opportunities that it is no wonder that our brightest young men are flocking into it in such numbers. Each year it seems as if our architectural schools were turning

out more incipient architects than could possibly find place; but the demand for good men is constantly a little larger than the supply, and opportunities which were unheard of a few years ago are now multiplying in all our large cities. It was not long since that the engineer would have scouted the idea of his requiring any architectural assistance in designing a bridge. But in New York they not only demand the highest architectural talent in connection with bridge building, but they decline to allow a public bridge to be built unless it comes up to a pretty high standard of excellence. In Boston the railway corporation which controls the transportation system and monopolizes so much of the streets, has recently called to its aid a commission of five prominent architects, who are to devise with its experts as to the proper architectural features for its elevated structures. And the story can be repeated in nearly all of our large cities. This country has the money, and if our architecture is not all that it might be, perhaps the architects themselves are partly to blame. Surely the opportunities are enough for any one.

REINFORCED STEEL CONCRETE.

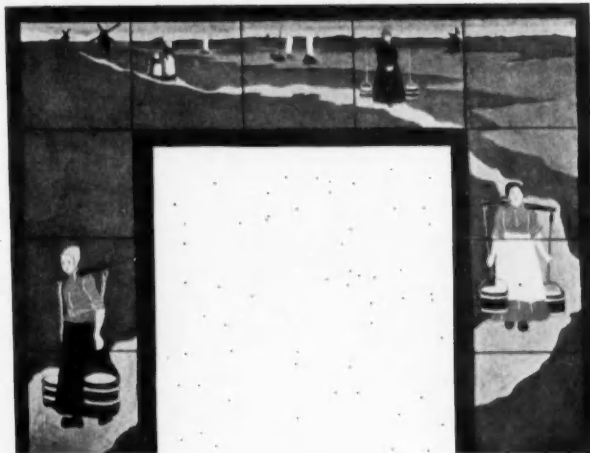
THE reinforced concrete mania is not confined to this country, to judge by the proceedings of the London International Congress of Architects. The reports of the papers read upon this subject, and the discussions which followed, sound very familiar. If they are as old to the English practitioners as they are to us, this must have been a dreary session of the Congress. We have been interested personally, however, in noting in the discussions about concrete, its use and abuse, the constantly recurring comparisons with brick and terra cotta, and the



PUBLIC LIBRARY, UNION HILL, N. J.
Albert Randolph Ross, Architect.
Terra Cotta furnished by New York Architectural Terra Cotta Company.

general opinion was by no means always to the disadvantage of the latter material. One of the speakers cleverly put it that nothing succeeds like failure. Surely the concrete constructors have had abundant opportunity to learn by their failures. That they are learning good lessons, that steel concrete is a recognized factor in good construction to-day, we do not question for a minute. It has its admirable uses, but the time is not yet when steel concrete can be carried to its ultimate conclusions, as claimed by those who favor it so strongly, without incurring a risk which was by no means

overlooked in the discussion of the Congress. In this connection it is of interest to notice how largely practice in this country was cited, and what frequent reference was made to the experience of the United States. About twenty-five years ago a bright young Englishman, Mr. Gale, upon winning the Godwin Bursary, chose to come to this country and study American constructive methods. He made a very interesting report thereon, which can be found tucked away in the proceedings of the British Institute. We believe that he was the first foreigner to recognize that we had any construction worth studying, and since then the number of architectural visitors to our shores has been yearly increasing, so that we can fairly claim now that we have something worth investigation, and, even though rein-



FAIENCE MANTEL.
Hartford Faience Company, Makers.



ELGIN NATIONAL WATCH WORKS, ELGIN, ILL.
Patton & Miller and Frank Abbot, Architects.
Roofed with French A. Tile made by Ludowici-Celadon Company.



DETAIL BY A. A. RITCHER, ARCHITECT.
Conkling-Armstrong Terra Cotta Company, Makers.

forced concrete came to us from France, we fancy there are a few ideas in its application which would be of value even to French construction.

That steel concrete has come to stay, and that it will be developed properly, is unquestioned. But Mr. Post voiced the sentiment of many American architects in his statement that ferro-concrete was used here with considerable trepidation, from the fact that there were no used constants which could be employed in computing strengths, and that, in fact, the opinion of the material was very much like that of the distinguished Mr. Weller with regard to veal pigs — "They were very good things when you know the lady as made them."



DETAIL BY WIDMANN, WALSH & BOISSELET, ARCHITECTS.
Northwestern Terra Cotta Company, Makers.

SUB CELLARS.

STEEL skeleton construction came to us out of the West, and now another feature has been added to architectural possibilities. In most of our cities there is a legal limit to the height to which a building can be carried. In none of them is there any limit to the depth to which it may descend. The buildings which were erected in Chicago up to a few years since, had very shallow cellars, or basements, as there existed a mistaken hypothesis that the soil under Chicago was not suitable for heavy buildings, and would not support the loads. It is a singular manifestation of the way in which even professional men will follow a blind lead, that for so many years Chicago architects continued to float their buildings on a layer of mud, when only a few feet beneath was a particularly good hard blue clay substratum resting directly upon rock.

The later buildings erected in Chicago have been very

largely equipped with from two to four sub-cellars, foundations being carried down from forty to one hundred feet below the street, giving ample opportunities for all the underground work which could be desired. There is no particular limit to the depth to which a building can be carried. While we are not yet able to excavate to a great depth as economically as we can the shallow cellars, such difficulty will undoubtedly be overcome, and we may easily predict that in buildings of the not very distant future there may be in some instances as many stories beneath ground as there are above it. In the meantime the tendency to build two or more cellars, one under the other, is quite manifest, and in some of the larger cities many of the older buildings, originally provided with but one basement, are having sub-cellars built under them without disturbing the superstructure, thus adding from one to two more stories available for mercantile purposes.

BUILDING OPERATIONS FOR AUGUST.

FROM official building reports received by *The American Contractor*, New York, from various cities, less than usual in number, by reason of Labor Day intervening,

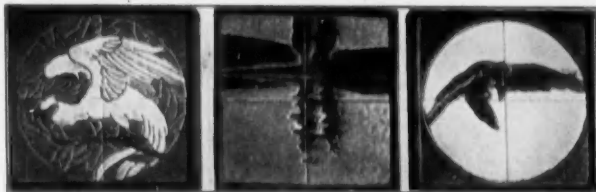
it appears that prosperity continues in the building trades. While some cities show a falling off, the loss is overbalanced fully two to one by gains. When it is remembered that August, 1905, with which month the present reports are contrasted, was a month of decided activity, largely breaking previous records, the present showing is exceedingly favorable. The following figures show the percentage of gains over August, 1905: Atlanta, 37; Bridgeport, 170; Cincinnati, 7; Denver, 65; Los Angeles, 4; Milwaukee, 16; Memphis, 18; New Haven, 18; Newark, 46; Omaha, 11; Philadelphia, 19; Portland, Ore., 94; St. Louis, 29; Seattle, 68; South Bend, 256;



DETAIL BY THE WINKLE TERRA COTTA CO.



DETAIL BY H. W. KIRCHNER, ARCHITECT.
American Terra Cotta & Ceramic Co., Makers.



FIREPLACE TILE MADE BY GRUEBY FAIENÇE COMPANY.

Syracuse, 93; Toledo, 280; Tacoma, 82; Washington, 14. Twelve of the cities reporting show a loss. The figures for all the boroughs of New York are not at hand, but the loss in Manhattan is 40 per cent. The percentage of loss in other cities is as follows: Buffalo, 57; Chicago, 15; Duluth, 21; Grand Rapids, 3; Harrisburg, 70; Kansas City, 20; Louisville, 50; New Orleans, 67; Paterson, 83. In New York the situation must be ascribed to the immense number of permits taken out last year, the enormous number of contracts placed during the earlier months of the present year and the circumstance that the construction of apartment houses is almost at a standstill, there being really an overconstruction of that class of buildings. Taken altogether the reports show a healthful and satisfactory condition.

ROMAN LIME.

THERE has recently appeared in the market a mortar-making material which promises to fill the place in this country which is occupied in France by the Lime of Tiel. This material, known as Roman Lime, is manufactured by the Cummings Cement Company of Akron, N. Y. It is hydraulic in character with certain fireproofing qualities of an asbestic nature and is warranted not to stain brick or stonemasonry, and capable of carrying a larger proportion of sand than either Quick Lime or Portland

Cement and is considerably cheaper.

Lime of Tiel is used in France to an enormous extent in concrete sea walls, reservoirs, aqueducts and buildings of all descriptions. On account of its stainless qualities it was used exclusively in the construction of the Equitable Building in New York City despite its cost of about \$4.50 per bar-

rel. Although the Lime of Tiel still brings a very high price in our market, it is frequently specified in important work of the highest class where a stainless mortar is desired.

The manufacturers of "Roman Lime" or "American Lime of Tiel" make the strong claim that whatever can be done with Lime of Tiel of France can also be done with their product, and that the latter is, in

every respect, fully equal to the French product, being as carefully manufactured and just as thoroughly hydrated.



DETAIL BY CHARLES VOLZ, ARCHITECT.

Standard Terra Cotta Works, Makers

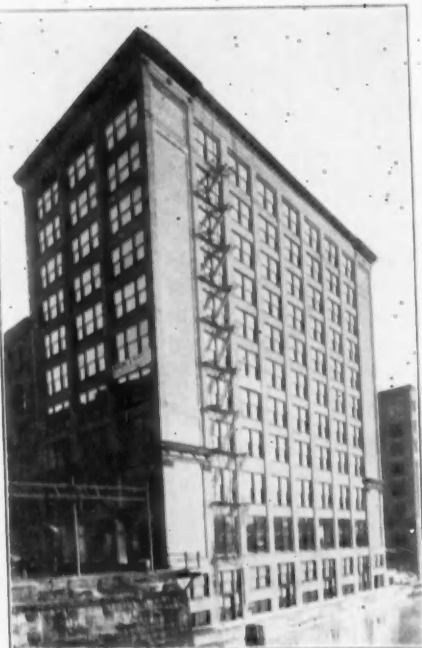
IN GENERAL.

Wyatt & Nolting, architects, Baltimore, announce the removal of their offices to the Keyser Building, Calvert and German streets.

V. O. Wallingford and C. W. Spencer, architects, Albuquerque, N. M., have discontinued their association. Mr. Spencer will continue the office at Albuquerque while Mr. Wallingford will locate in San Francisco.

Young & Son, architects, Templeton Building, Salt Lake City, request manufacturers' catalogues and samples.

The National Electrical Contractors' Association, W. H. Morton, secretary, Utica, N. Y., has adopted a set of standard symbols for wiring plans, which are meant especially to be helpful to architects.



THE RYERSON WAREHOUSE, CHICAGO, ILL. Holgbird & Roche, Architects.

Fireproofed throughout by National Fireproofing Co.



DETAIL BY THE NEW JERSEY TERRA COTTA COMPANY.



COMMONWEALTH ELECTRIC CO. STATION, CHICAGO, ILL. Shepley Rutan & Coolidge, Architects.



WAINSCOT IN CAFÉ OF HOTEL DEVON, NEW YORK.
Finished by The Rookwood Pottery Co., in colored mat glaze Valencia.

The terra cotta used in the house of S. G. Bayne, Esq., White Plains, N. Y., Frank Freeman, architect, illustrated in *THE BRICKBUILDER* for September, was manufactured by the Excelsior Terra Cotta Company.

The American Enamelled Brick & Tile Company are furnishing about a million of their brick for the new Plaza Hotel, New York City. This company is shipping nearly one-half a million of bricks per month, which they are enabled to do because of the enlargement of their plant, made necessary by an increased demand for enamelled brick throughout the country.

The following named buildings will be roofed with Edwin Bennett's roofing tile: Davidson residence, Washington, Wood, Donn & Deming, architects, red unglazed Mission tiles; Williams residence, Washington, G. O. Totten, architect, green glazed Spanish tiles; Bliss residence, Washington, A. C. Goner, architect, red unglazed Spanish "S" tiles; Shoemaker residence, Philadelphia, James C. Fernald, architect, red unglazed Spanish tiles.



THE MILWAUKEE ELECTRIC RAILROAD & LIGHT CO.'S
PUBLIC SERVICE BUILDING.
Brick furnished by Ohio Mining and Manufacturing Company.

The idea of using glazed tiles or brick, to overcome the soot of London, is not new. It has been advocated for some years and practised, in spots and panels, now and then. But Mr. Halsey Ricardo, who received the Society of Arts Silver Medal about four years ago, for a paper on "The Architect's Use of Enamelled Tiles," has put his ideas into practise by facing the walls of a whole house — a large unattached mansion in the Addison Road — with glazed brick colored green and blue, dressed with a matt-glazed terra cotta of a light color. The mass of the wall appears to be green; the blue is used in smaller quantities for spandrels, etc. The roof is of glazed Spanish tiles of a bright green.

The city of Springfield, Mass., is alarmed at the erection of a tall building in its business district and that excellent spokesman *The Republican*, pleads for a maximum limit of one hundred feet as a height for future buildings. This is probably a satisfactory limit for the needs of Springfield at present and for many years to come. But the newspaper quoted goes too far in saying that New York and Chicago would be better off in a business way had skyscrapers been limited to one hundred feet. There is no doubt but that the skyscraper is in need of regulation, and none are so ready to welcome this as are the architects of the country. The upward tendency of buildings is not beautiful, nor sanitary, nor in the end wise, but it is almost a platitude to say that under the present conditions it is a necessity.

COMPETITION FOR A MASONIC TEMPLE.

THE Masonic Temple Company of Beaumont, Texas, invites competitive plans for a two-story Masonic Temple, sixty by one hundred and fifteen feet, cost not to exceed \$25,000.00. Successful architect to give bond that building can be erected for estimate given. The company reserves the right to reject any and all plans. For further particulars, address C. E. Walden, Chairman Building Committee, Beaumont, Texas.

FOR SALE — Architect's office with furnishings, located in a city in the middle West with a population of 12,000, mostly Germans. No other architect in the city. There are also several near-by towns without architects. Good opportunity for a German. Address "N. B." care "The Brickbuilder."

ARCHITECTURAL DRAUGHTSMEN WANTED — Good paying positions for competent men in a terra cotta factory located near New York City. State age, training and references. Address "T. C." care "The Brickbuilder."

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THE GRADUATE YEAR. Affords opportunity for advanced work in design and other subjects, leading to the degree of M. S. in Arch.

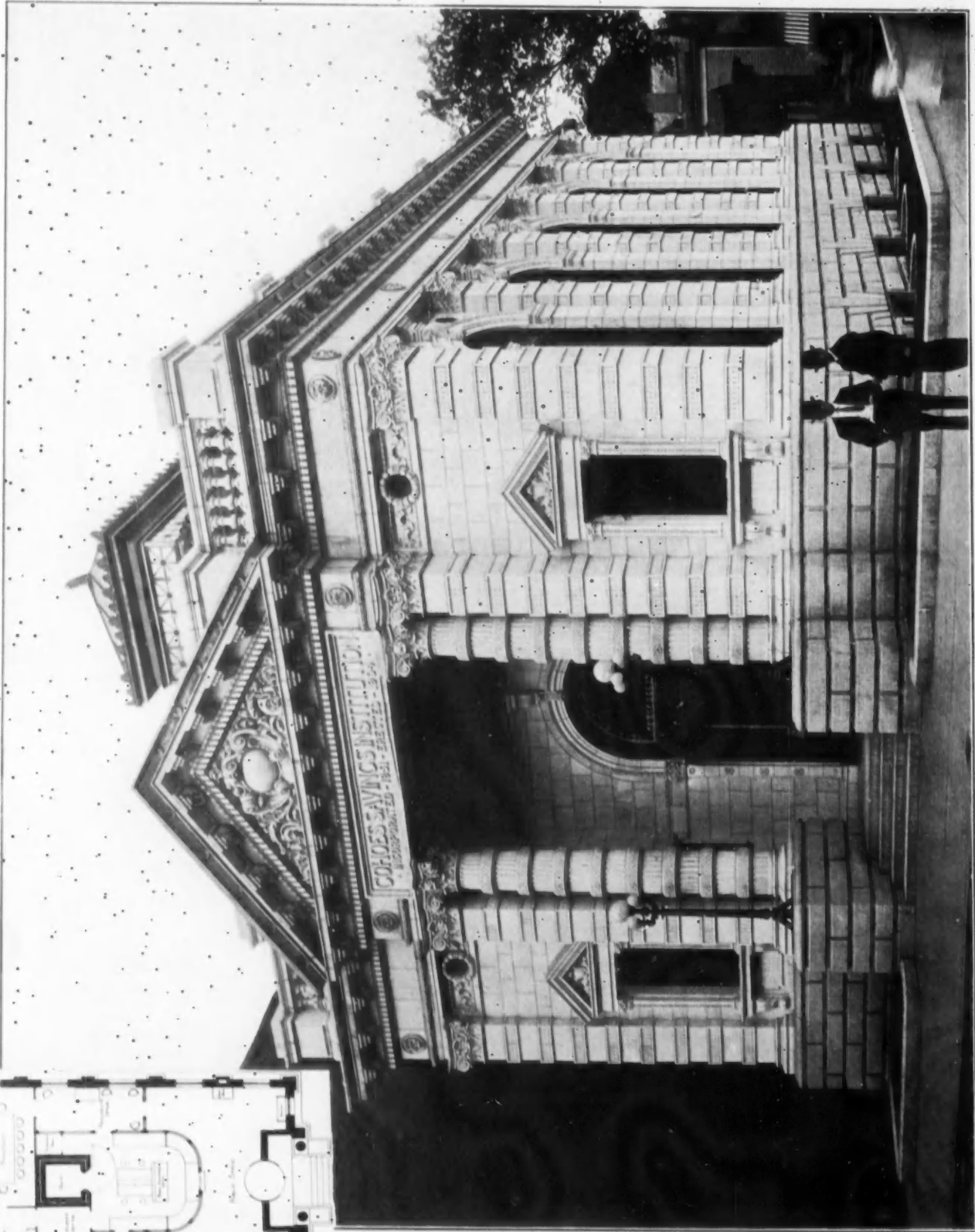
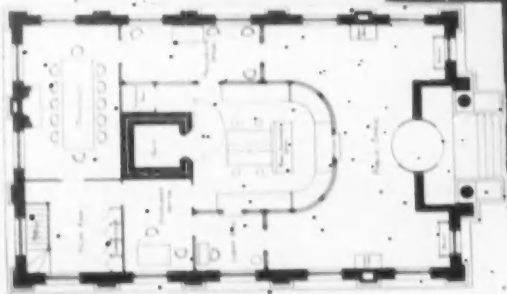
THE TWO YEAR SPECIAL COURSE. For qualified draughtsmen, offers advanced technical training, yielding a certificate of proficiency.

THE UNIVERSITY. Also grants advanced standing to college graduates, offers a combination of liberal and technical courses whereby the degrees of A. B. and B. S. in Arch. can be taken in six years, and conducts a Summer School in which architectural studies may be taken.

FOR FULL INFORMATION address Dr. J. H. PENNIMAN, Dean, College Hall, University of Pennsylvania, Philadelphia, Pa.

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THE BRICKBUILDER-SUPPLEMENT



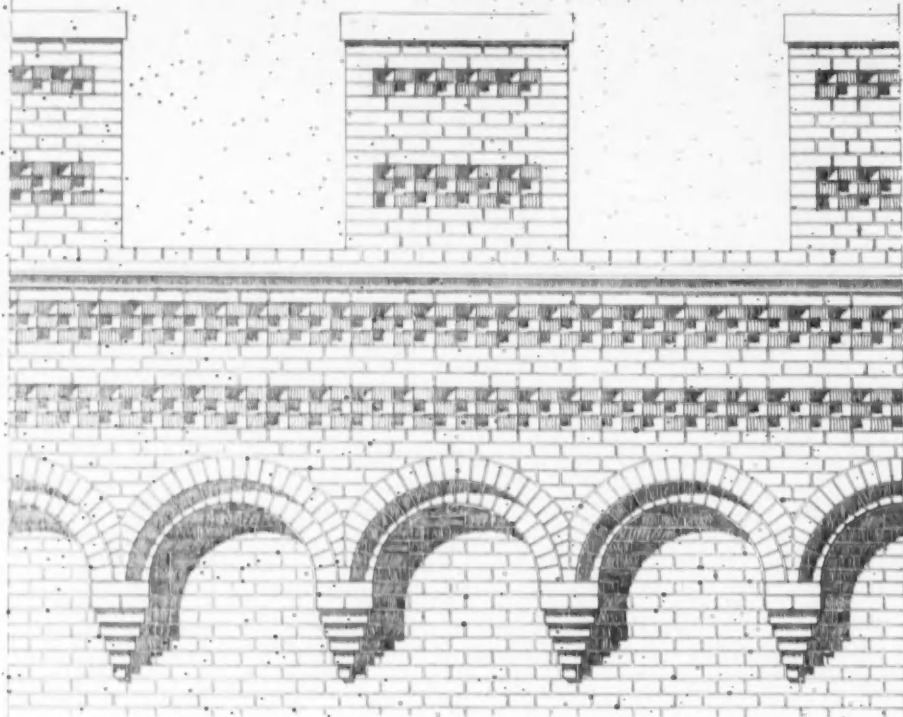
THE COHOES SAVINGS INSTITUTION, COHOES, N. Y.

WILLIAM M. GODDARD, ARCHITECT.

THIS BUILDING, ABOVE THE WATER TABLE, IS BUILT ENTIRELY OF WHITE-GLAZED TERRA COTTA, VELLUM FINISH. MANUFACTURED BY THE EXCELSIOR TERRA COTTA COMPANY.



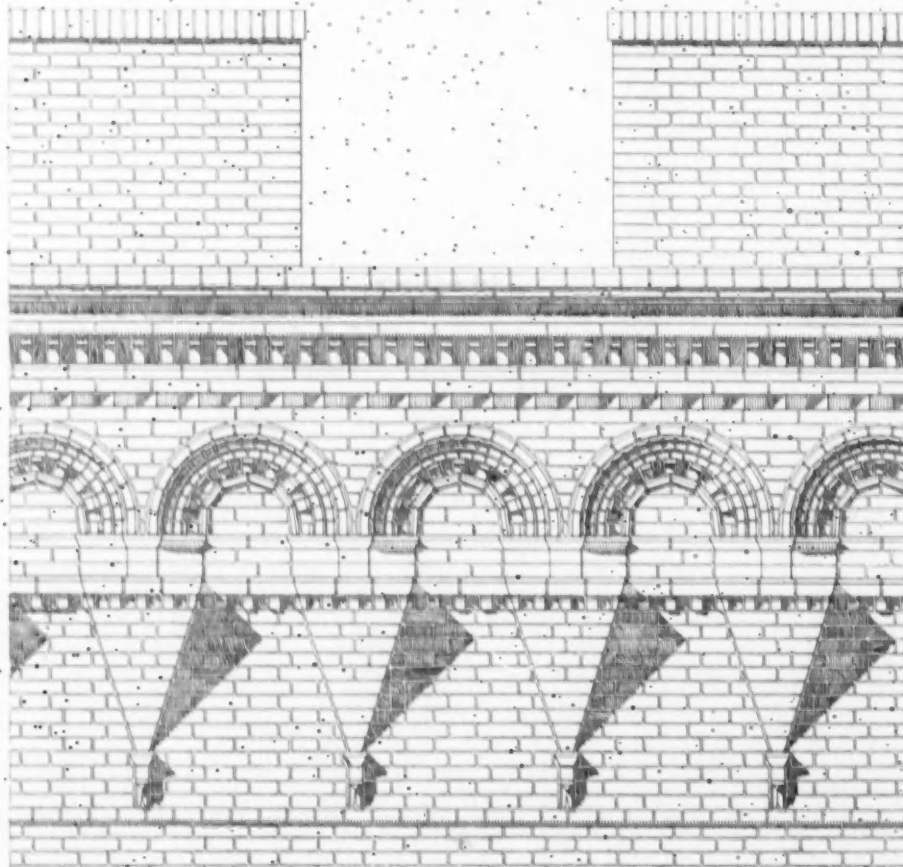
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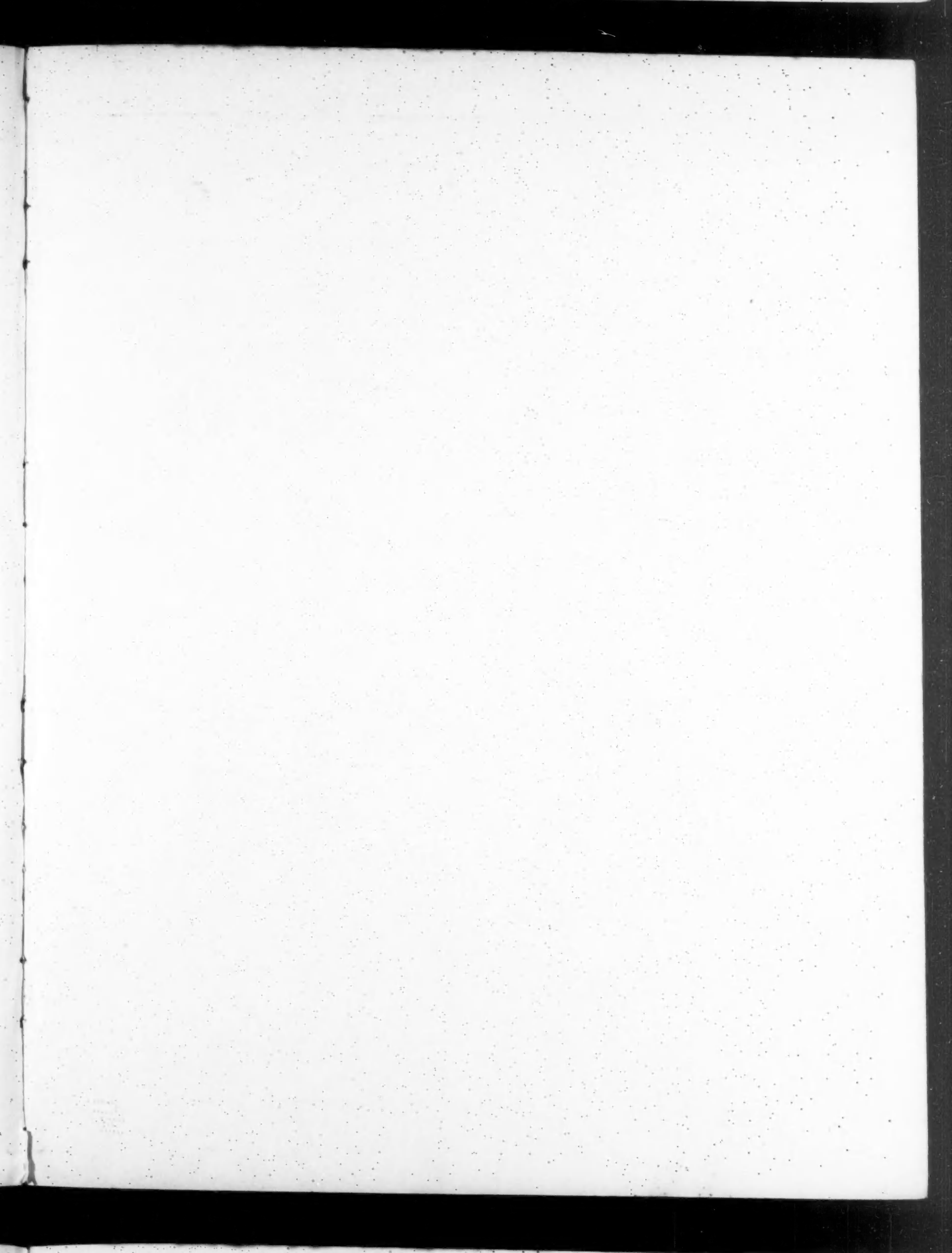
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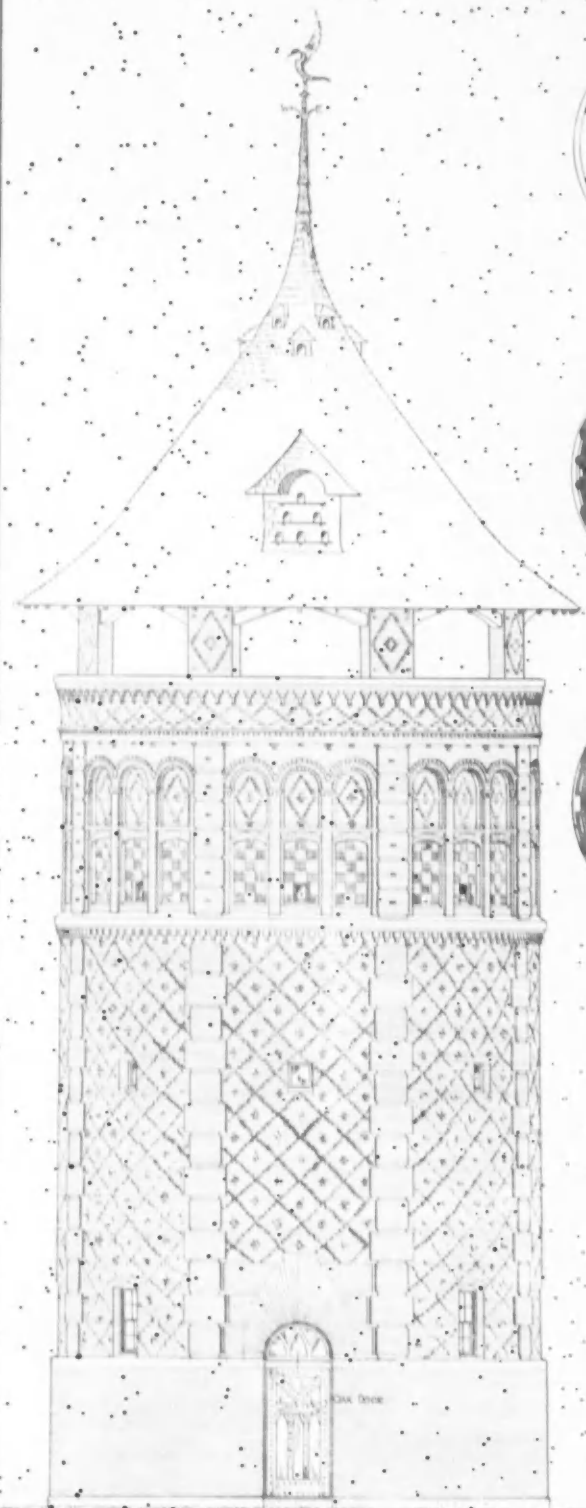


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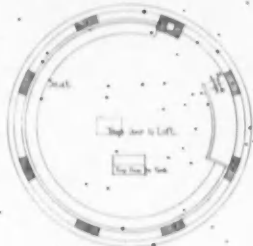
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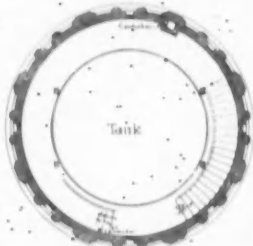




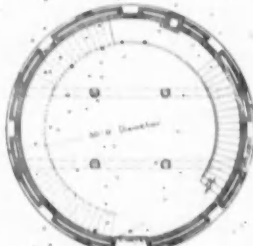
ELEVATION



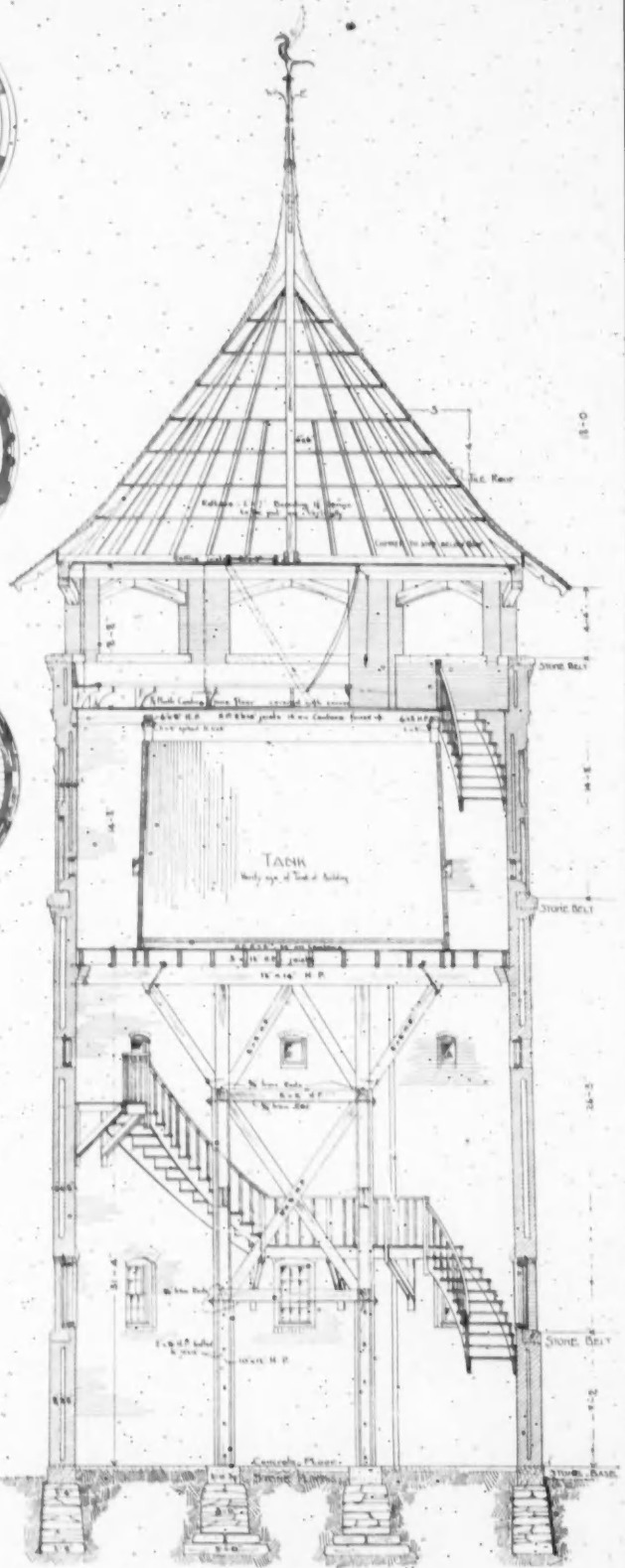
BALCONY FLOOR



TANK FLOOR

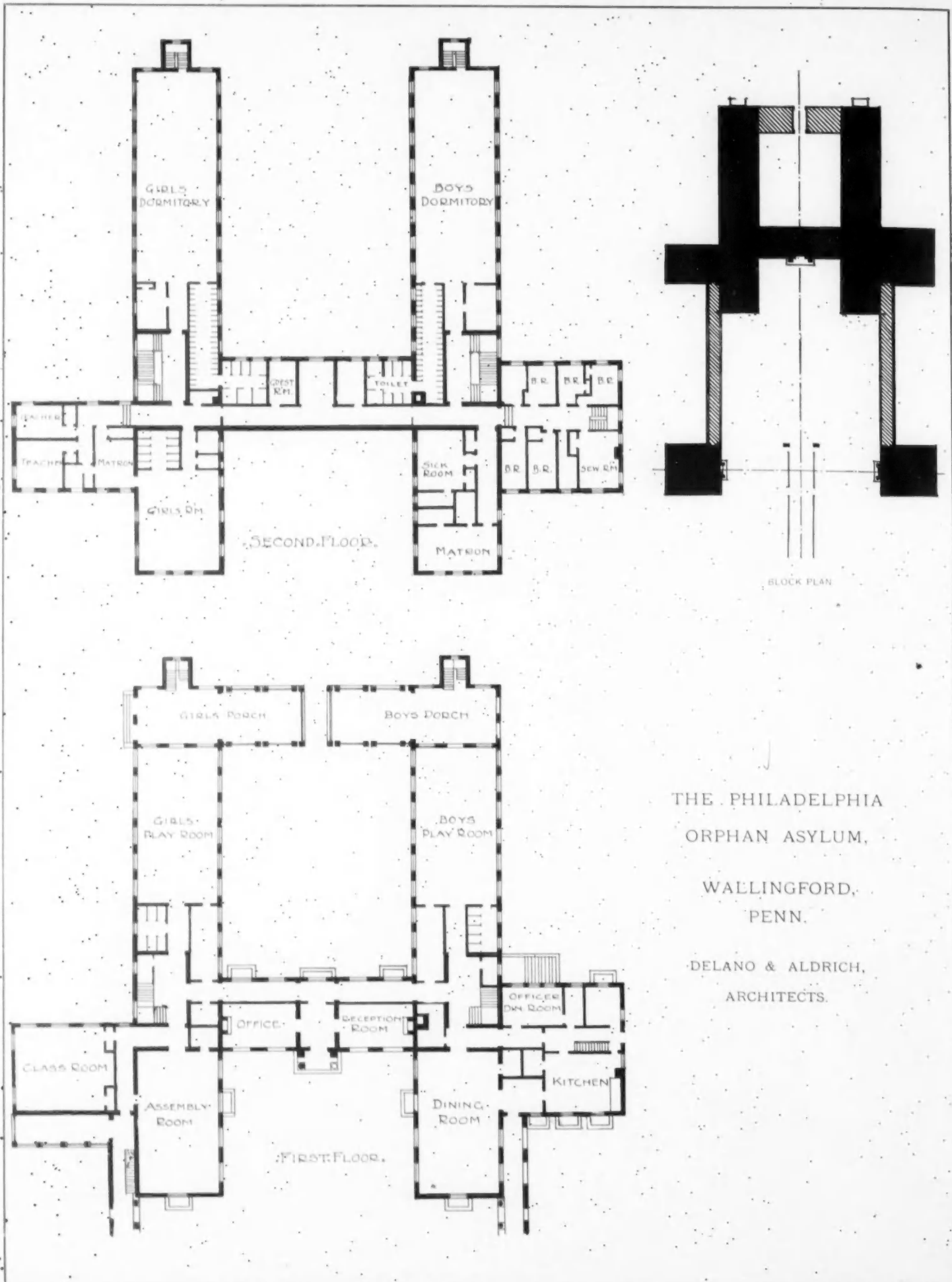


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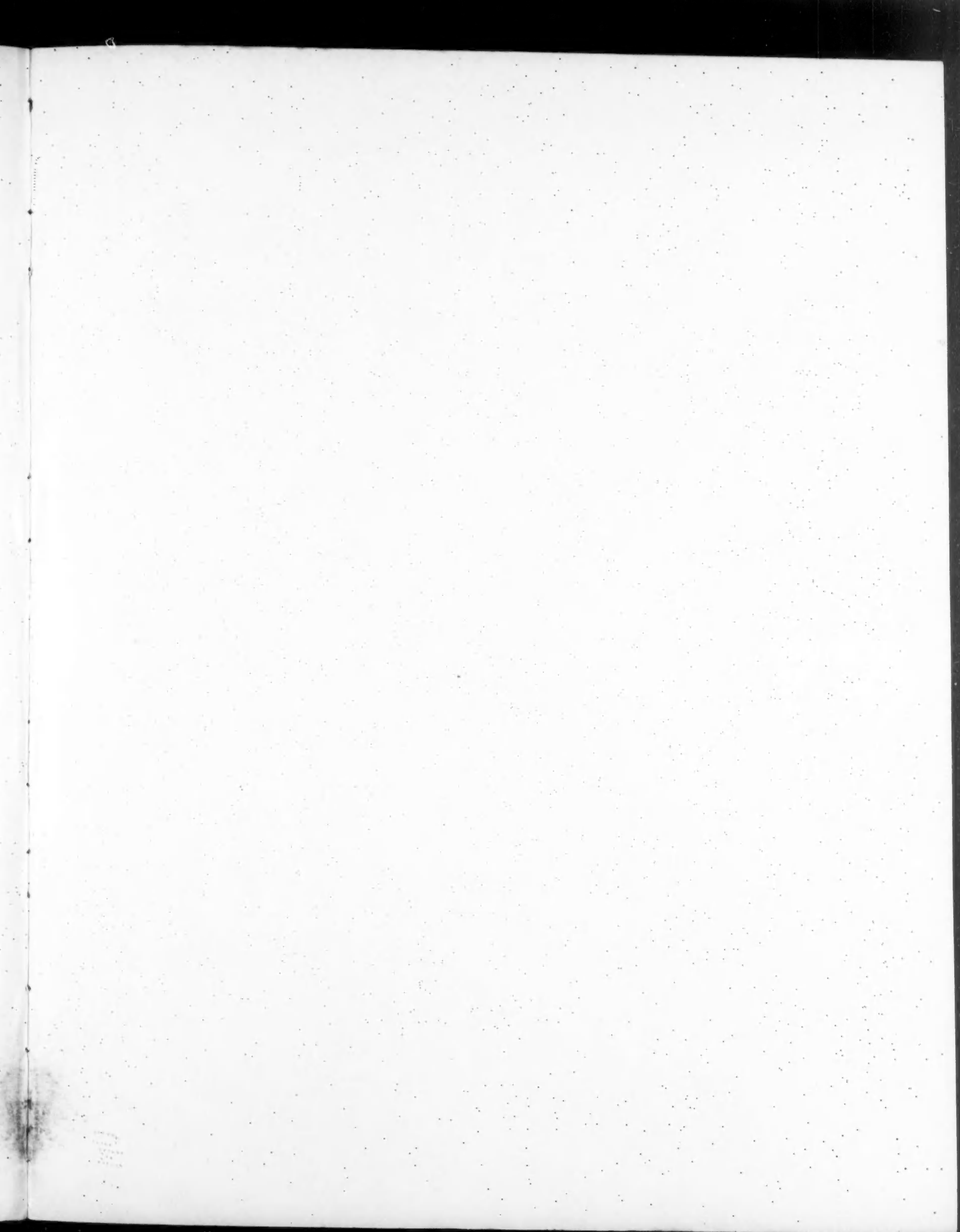


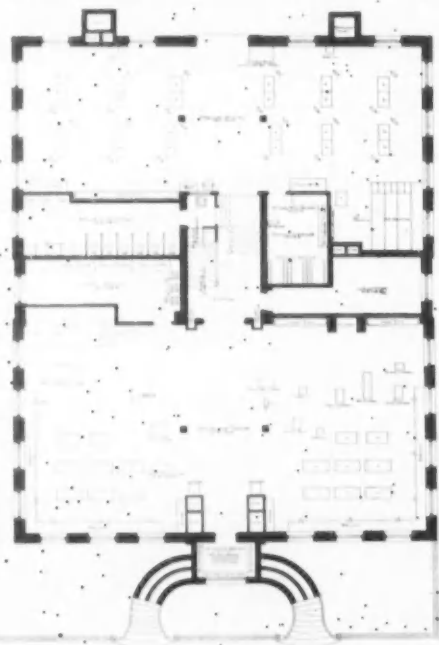
SECTION

WATER TOWER AT CHAPINVILLE CONN
STONE, CARPENTER & WILLSON, ARCHITECTS



THE PHILADELPHIA
ORPHAN ASYLUM,
WALLINGFORD,
PENN.
DELANO & ALDRICH,
ARCHITECTS.

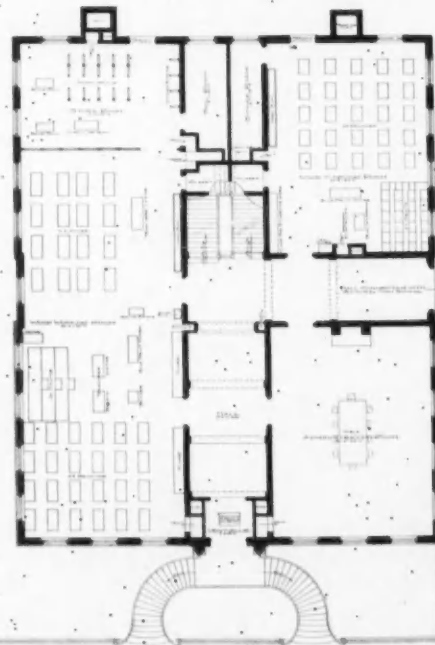




BASEMENT PLAN.



SECOND FLOOR PLAN.
MANUAL TRAINING SCHOOL,
SCRANTON, PA.

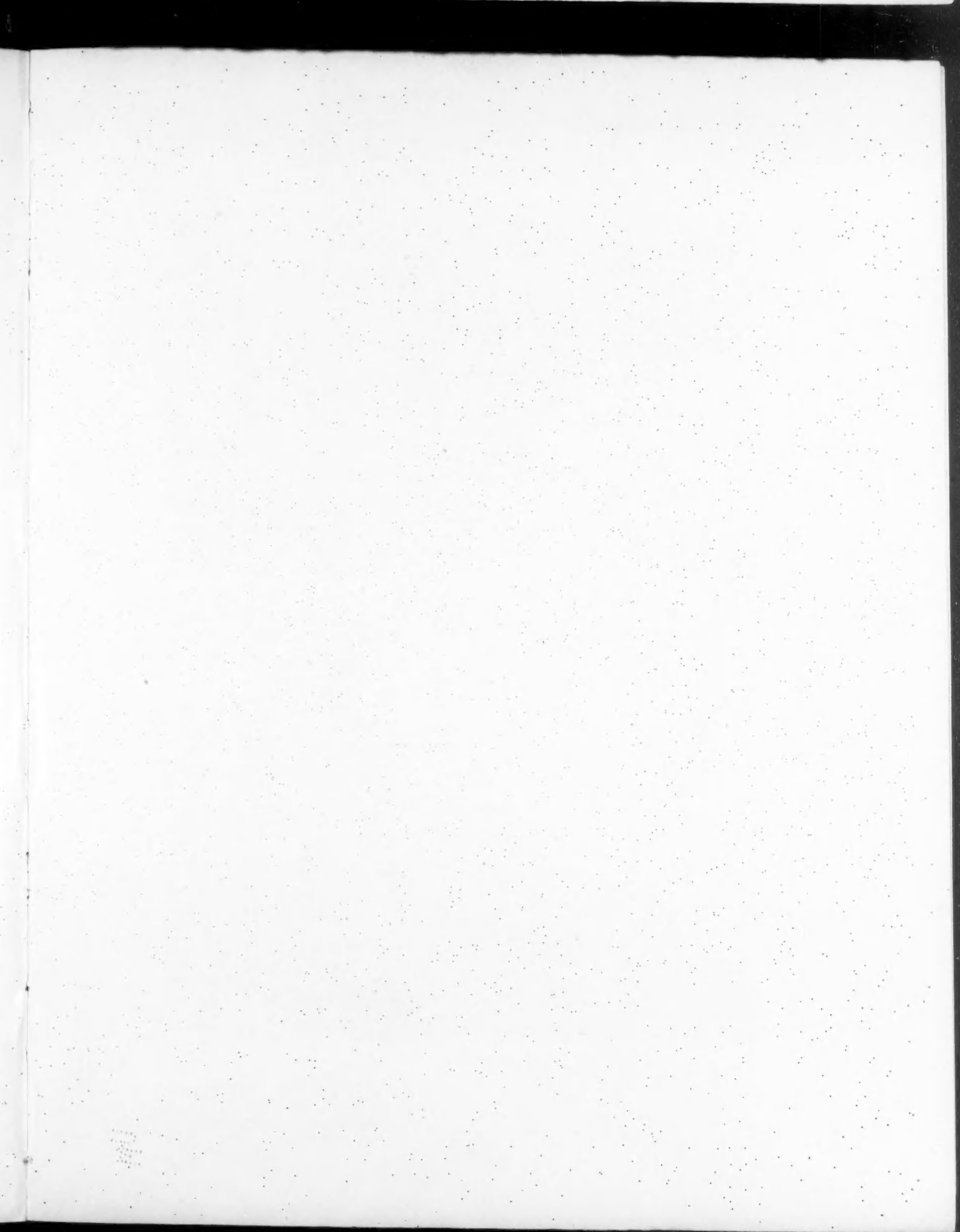


FIRST FLOOR PLAN.

ITTLE & O'CONNOR AND EDWARD LANGLEY, ASSOCIATE ARCHITECTS.



THE EGENTON ORPHAN ASYLUM, BALTIMORE MD.
Wm. A. NORTON, ARCHT.



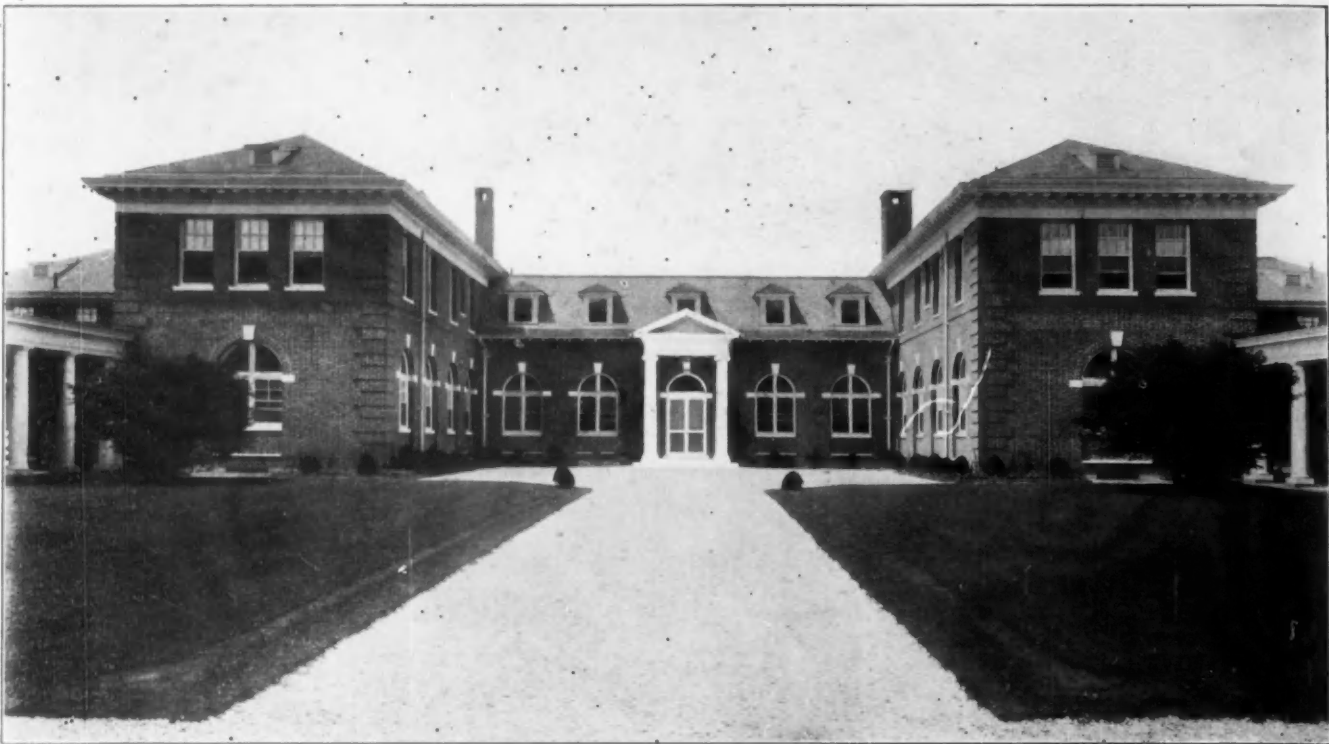


FRONT ELEVATION.

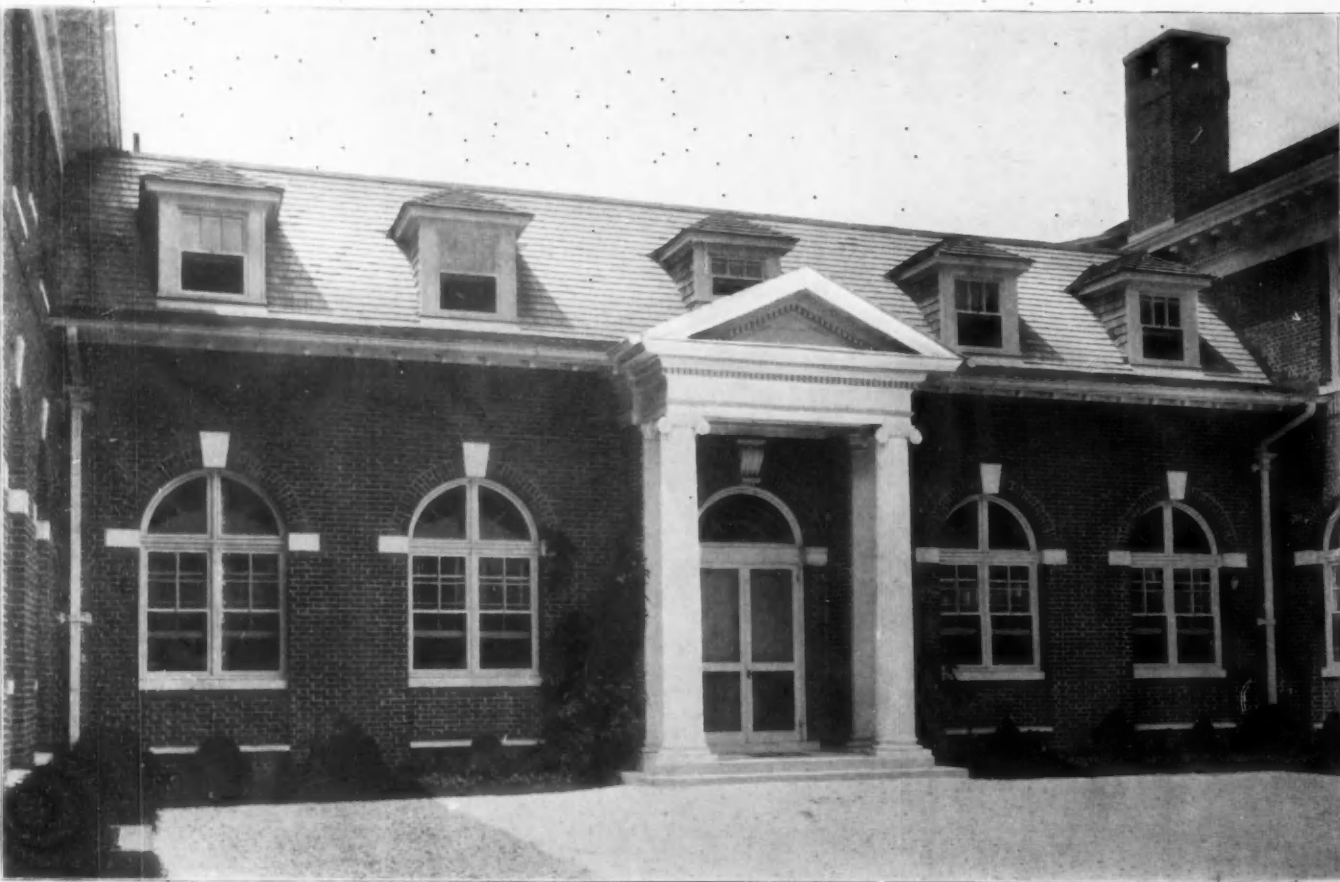


REAR ELEVATION.

WILLIAM L. ELKINS MASONIC HOME FOR ORPHAN GIRLS, PHILADELPHIA, PA.
HORACE TRUMBAUER, ARCHITECT.



FRONT ELEVATION.



DETAIL OF MAIN ENTRANCE.
PHILADELPHIA ORPHAN ASYLUM, WALLINGFORD, PA.
DELANO & ALDRICH, ARCHITECTS.



LAUNDRY BUILDING.

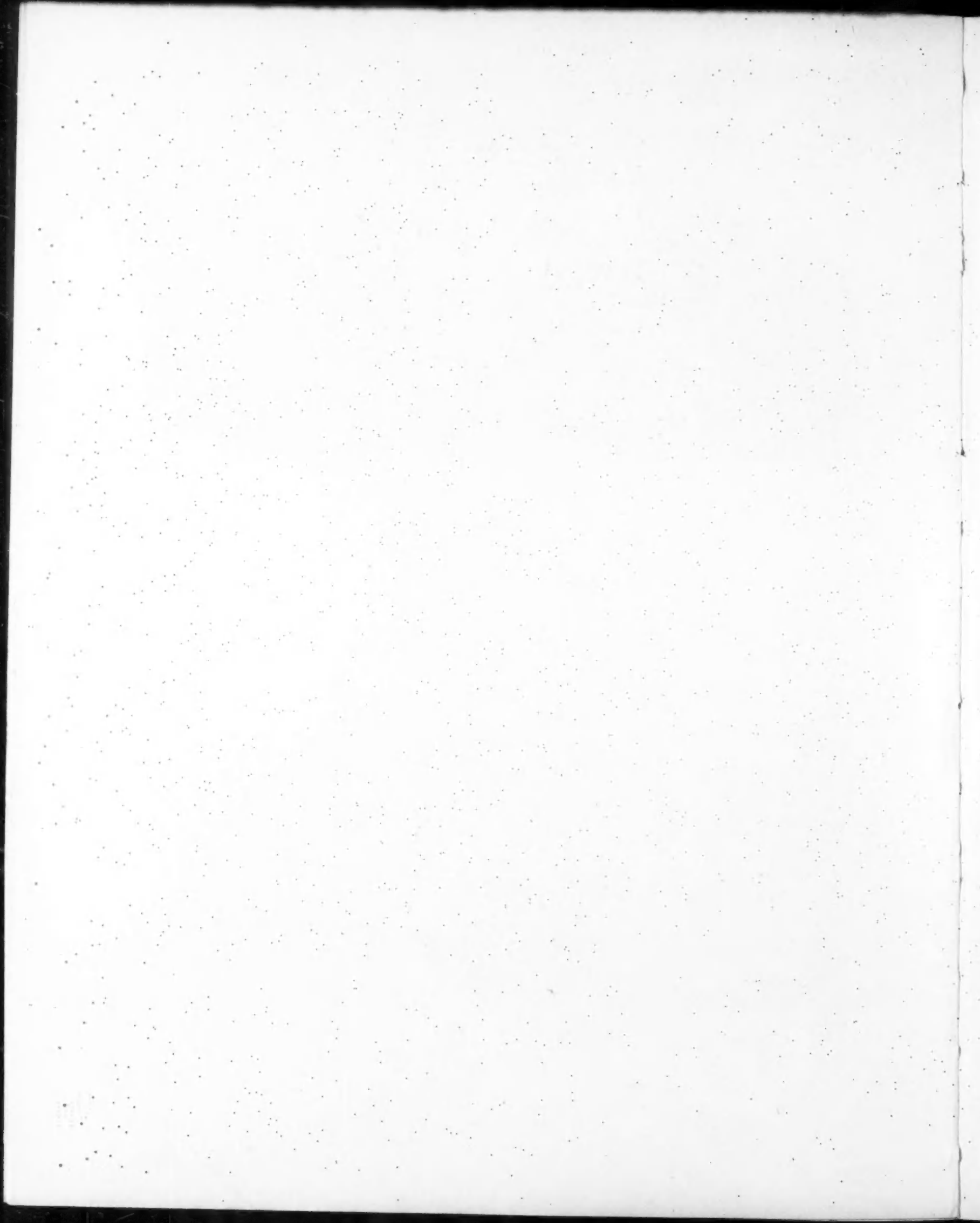


REAR ELEVATION.



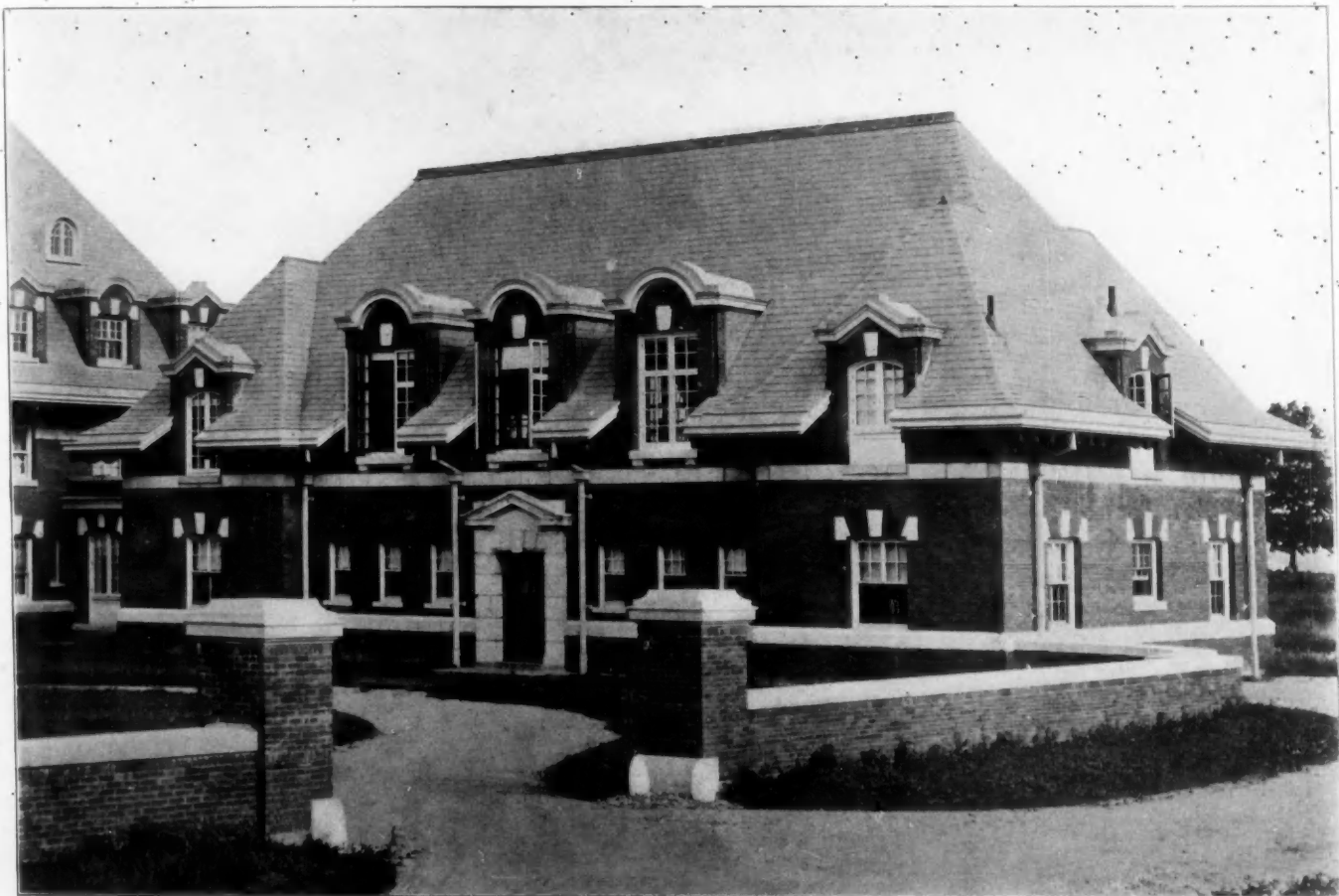
VIEW IN THE COURT.

PHILADELPHIA ORPHAN ASYLUM, WALLINGFORD, PA.
DELANO & ALDRICH, ARCHITECTS.

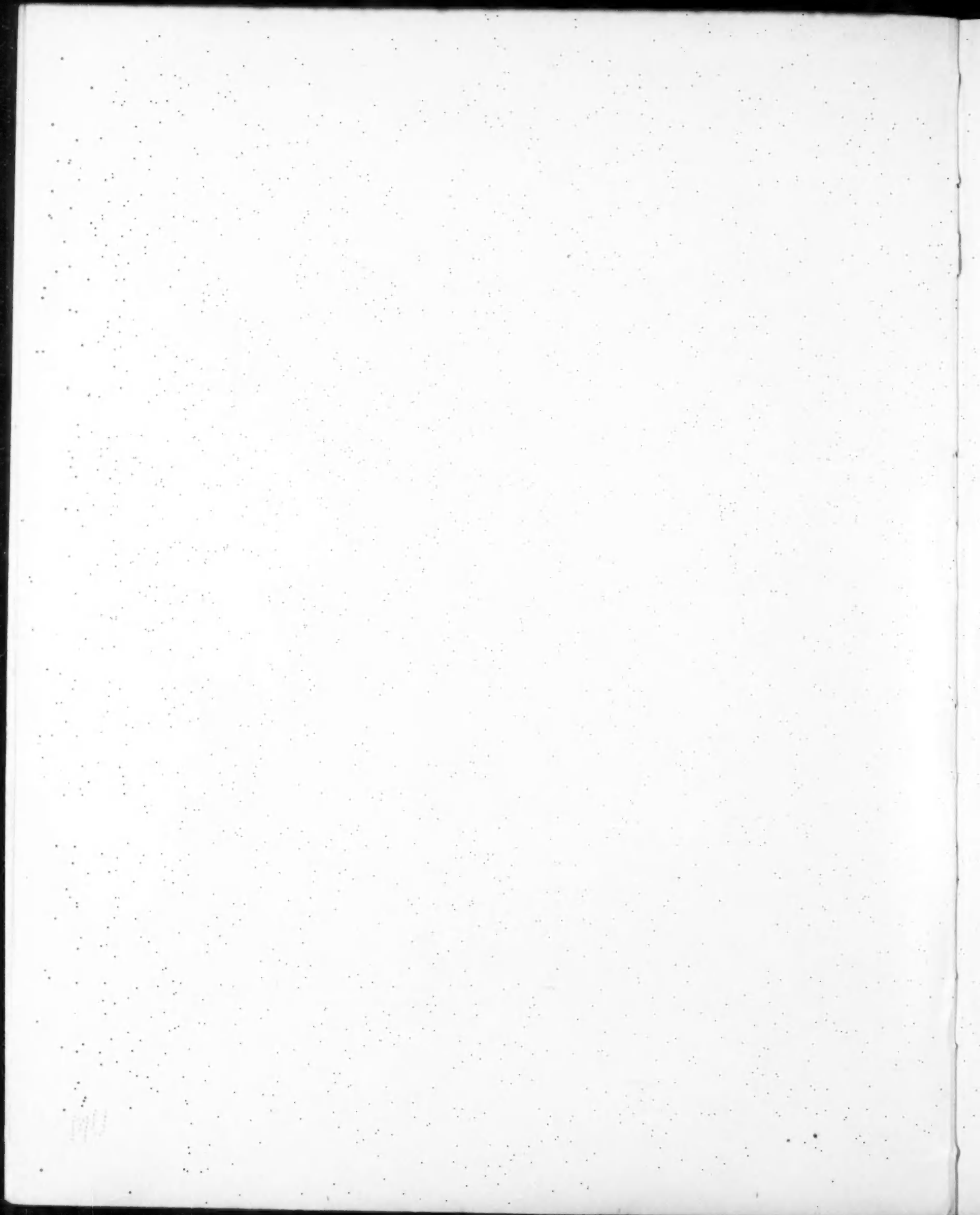




FRONT ELEVATION.



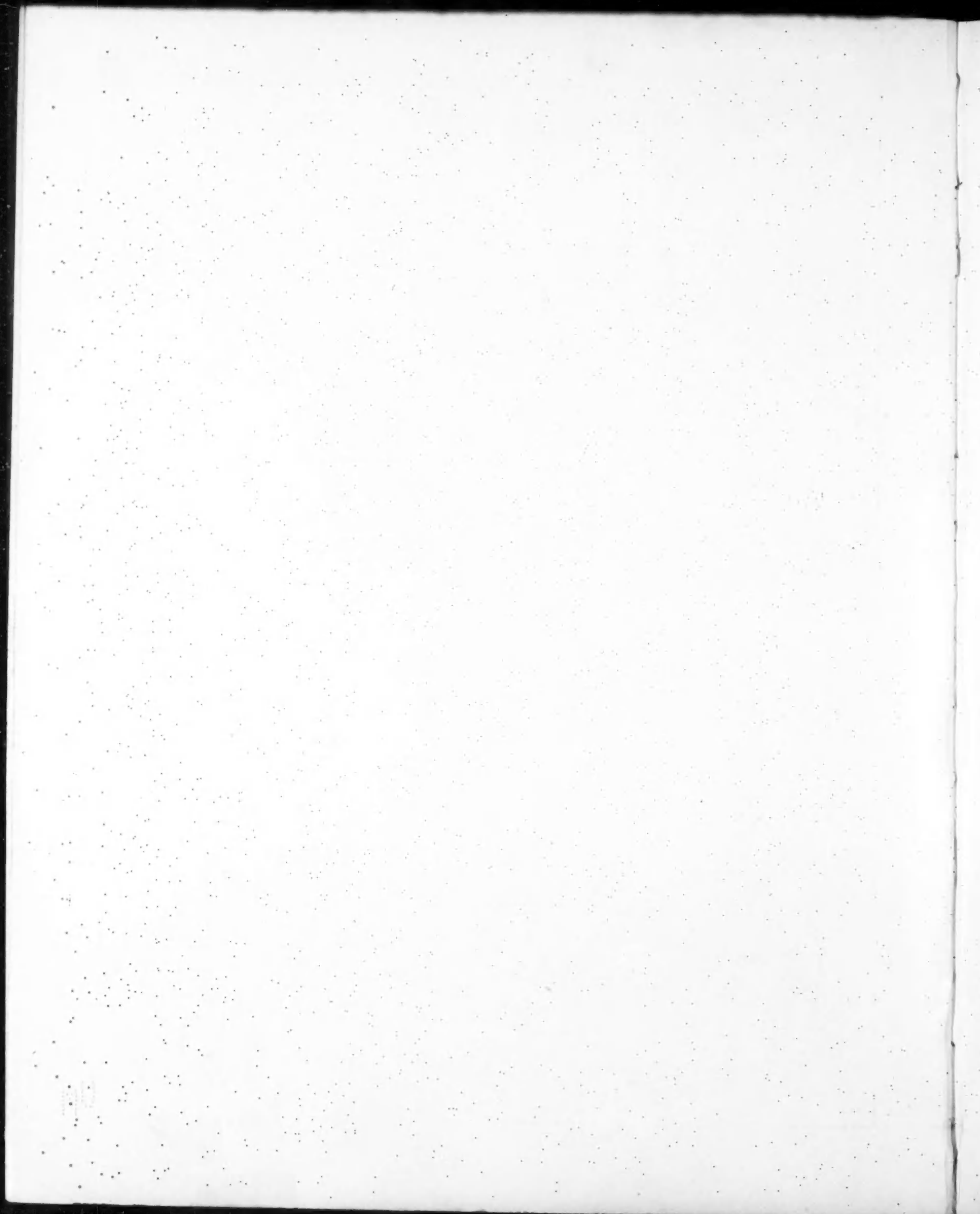
THE GYMNASIUM.
MRS. DOW'S SCHOOL, BRIARCLIFF MANOR, N. Y.
H. VAN BUREN MAGONIGLE, ARCHITECT.

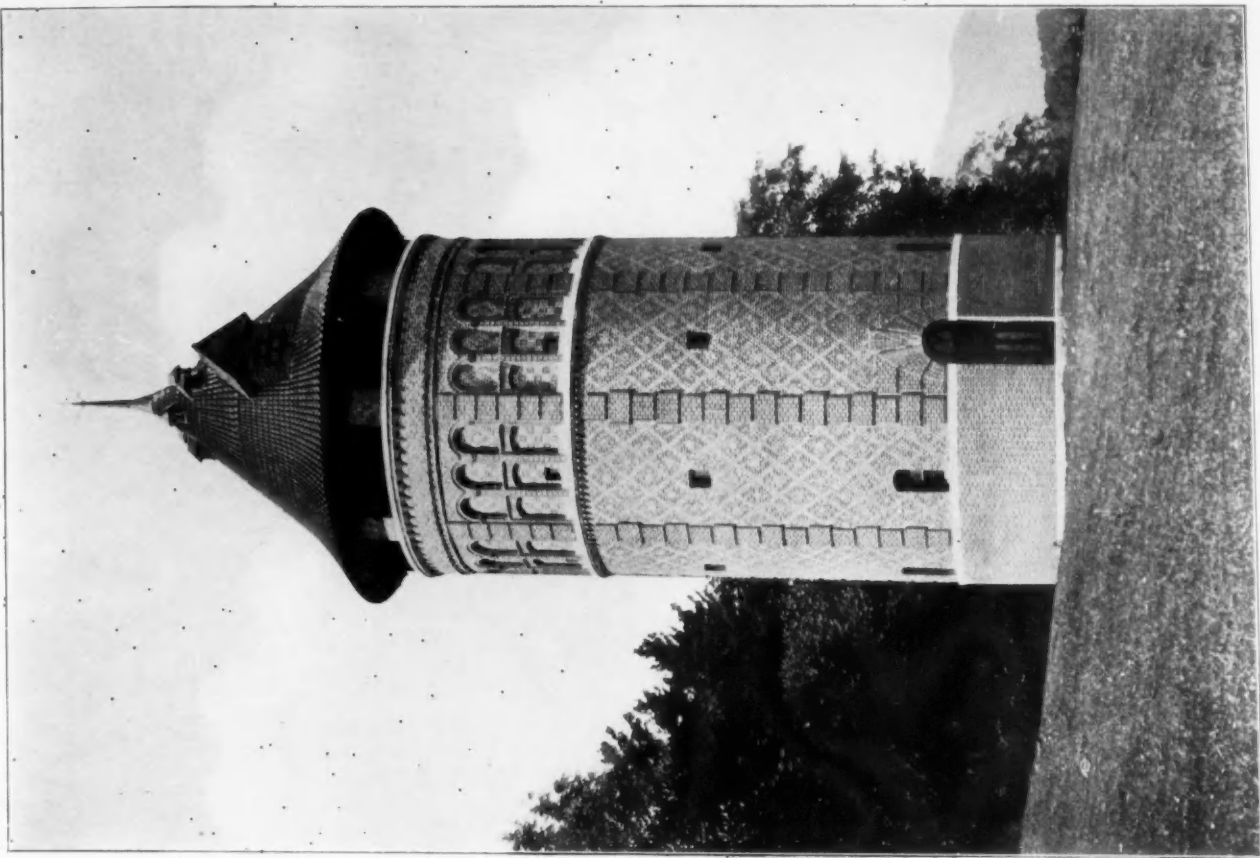




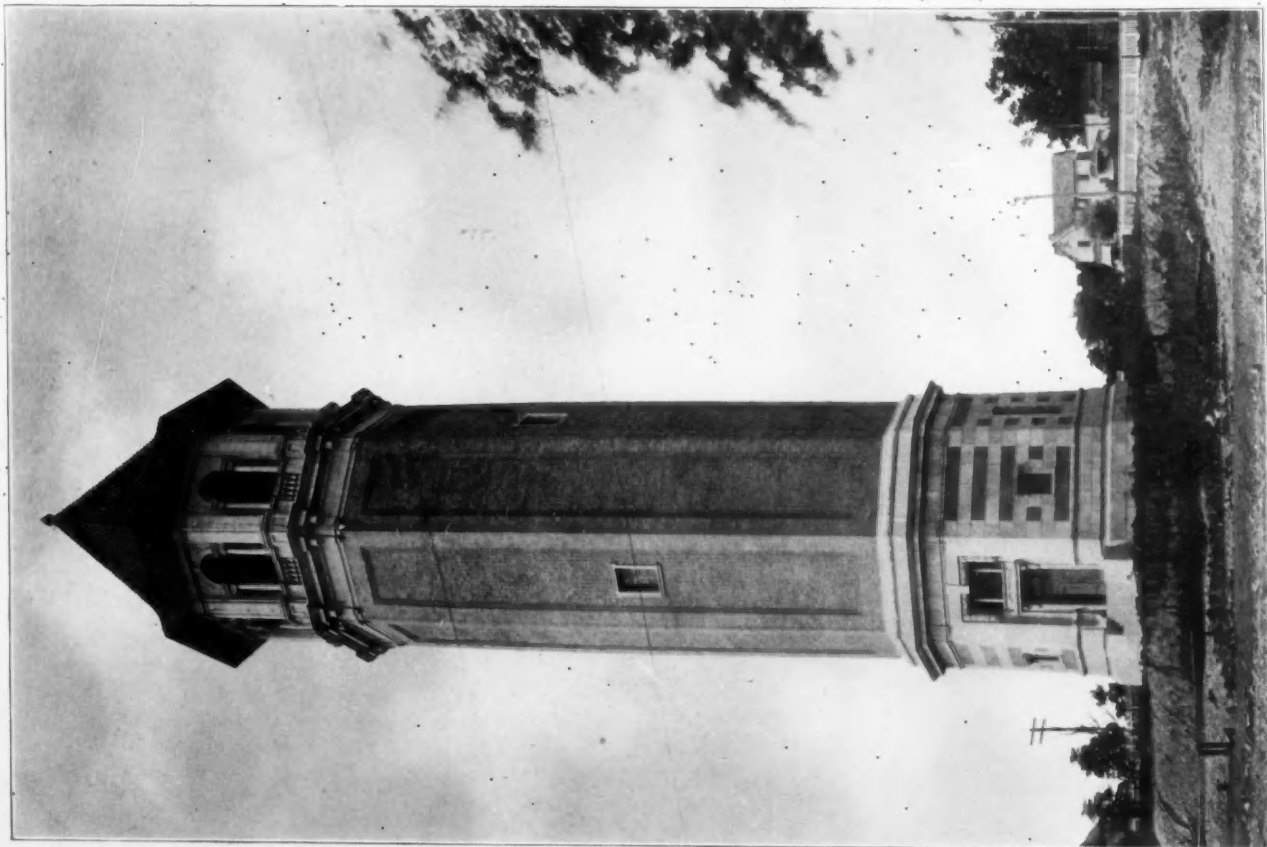
J. DETAIL OF MAIN ENTRANCE.

MRS. DOW'S SCHOOL, BRIARCLIFF MANOR, N. Y.
H. VAN BUREN MAGONIGLE, ARCHITECT.

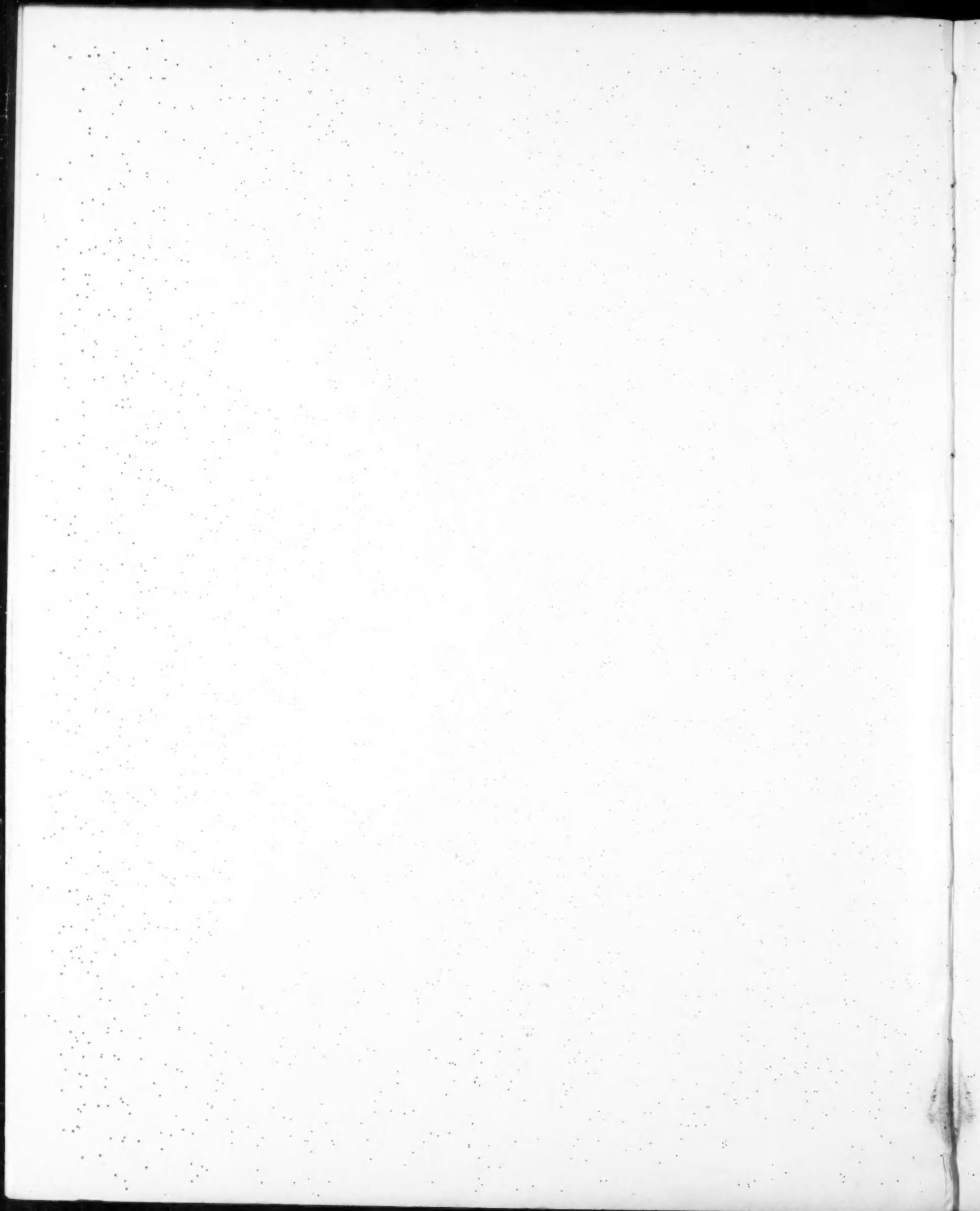


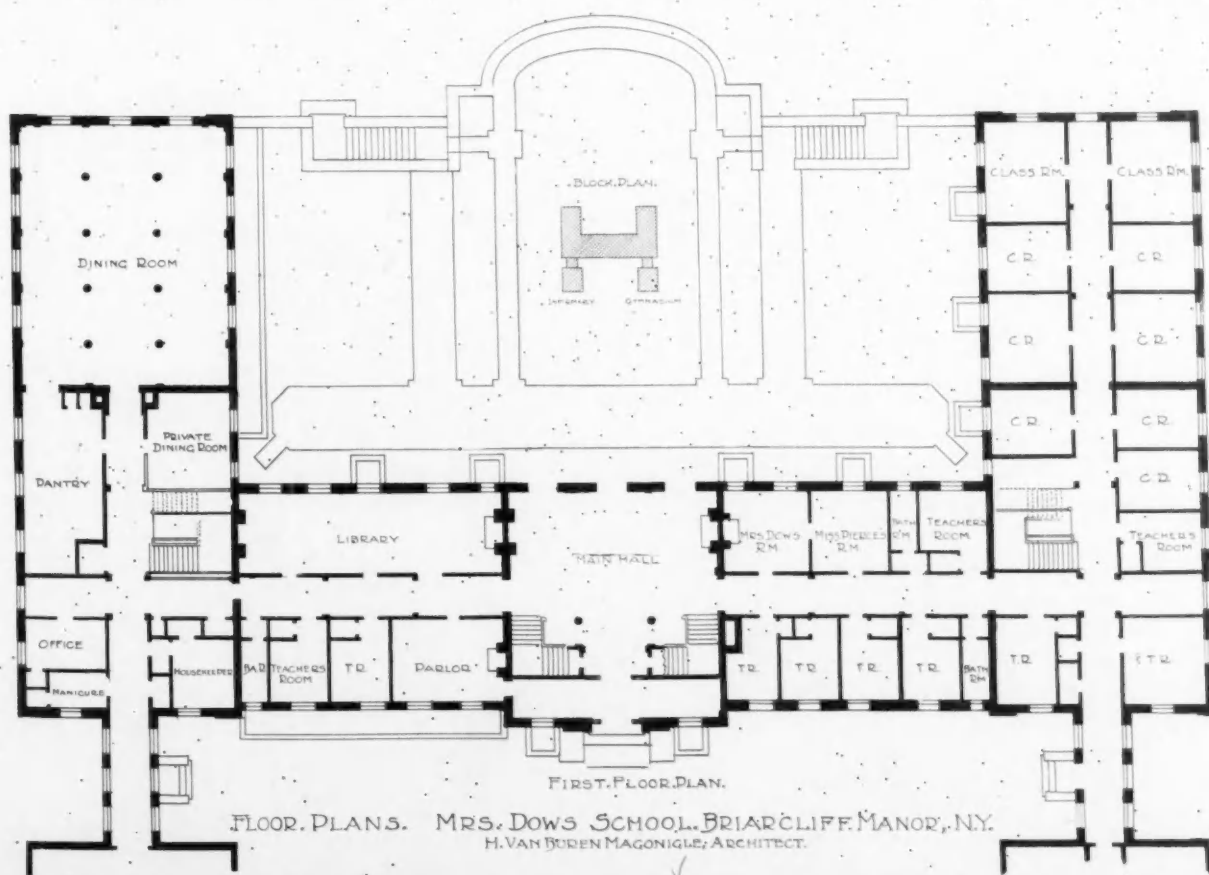
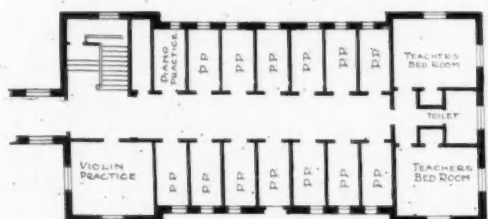
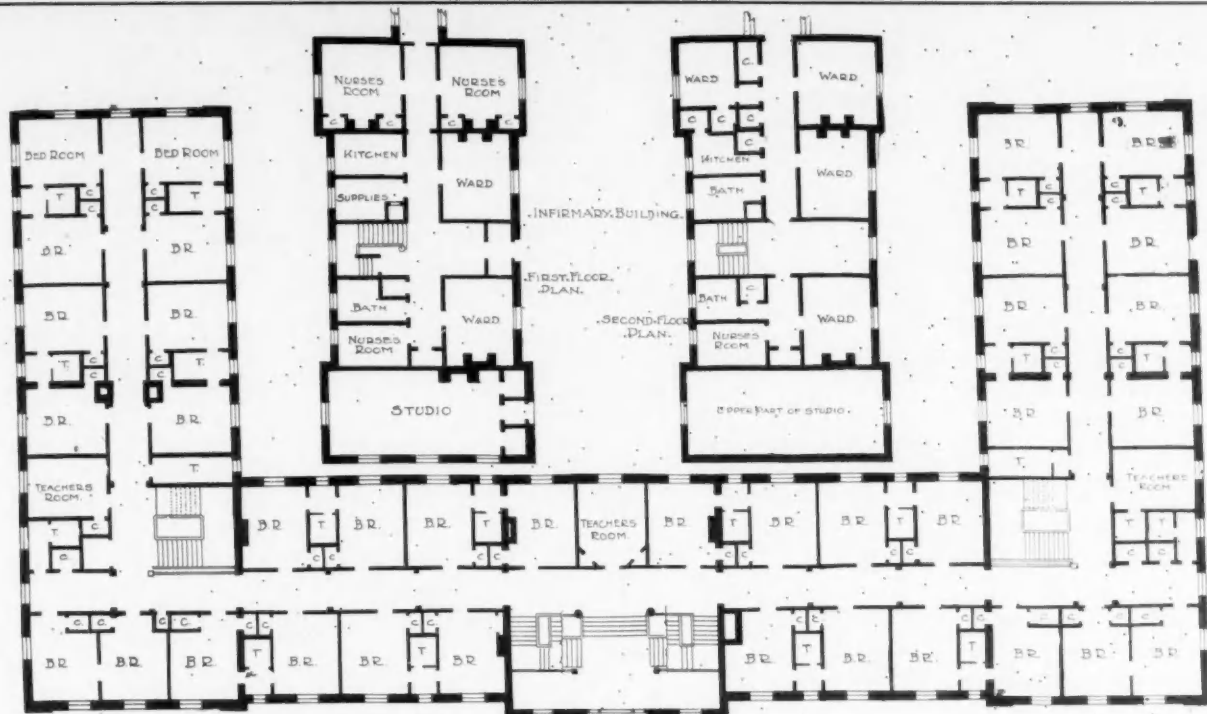


WATER TOWER AT CHAPINVILLE, CONN.
STONE, CARPENTER & WILSON, ARCHITECTS.

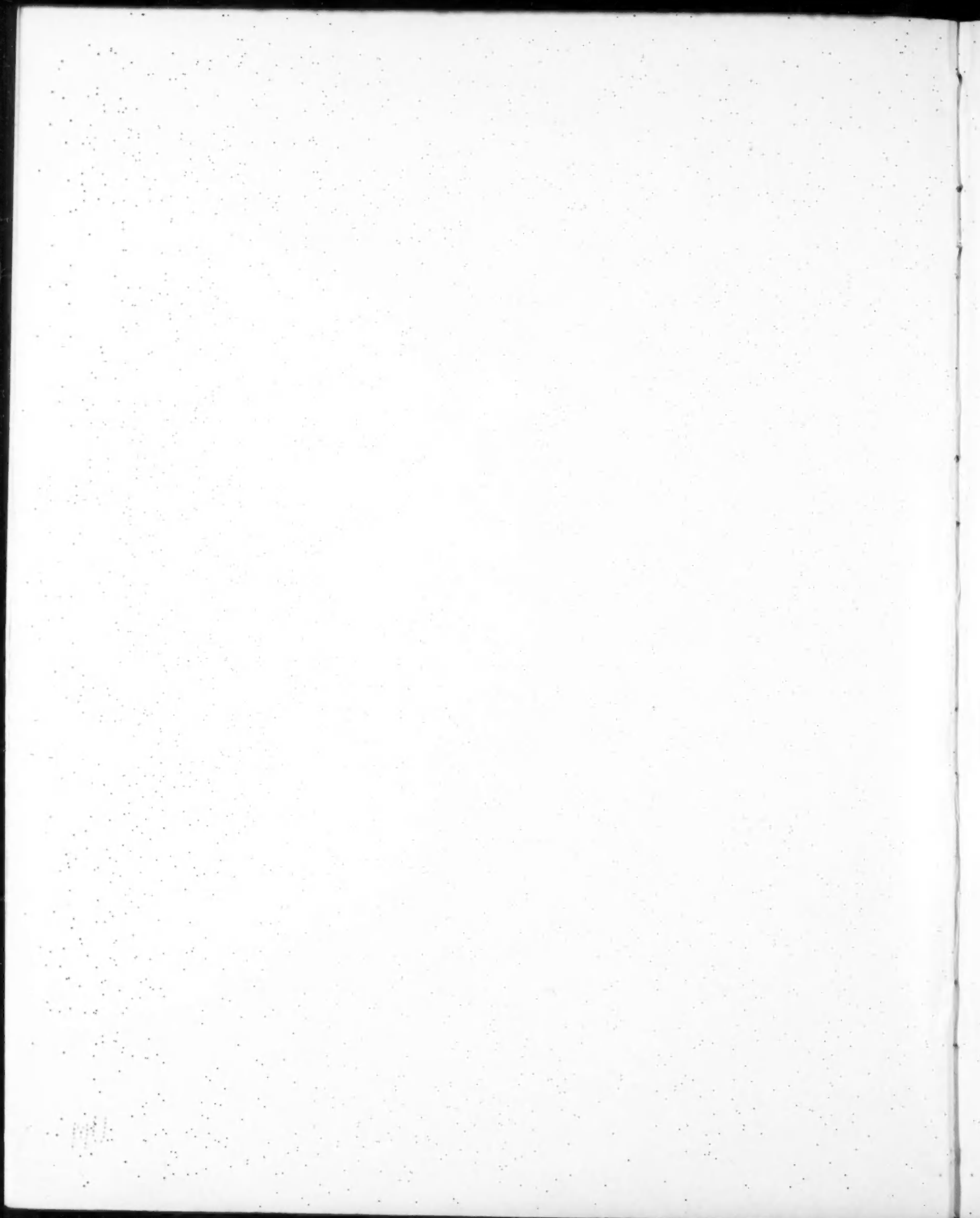


WATER TOWER AT ROLAND PARK, BALTIMORE, MD.
WILLIAM J. FIZONE, ARCHITECT.



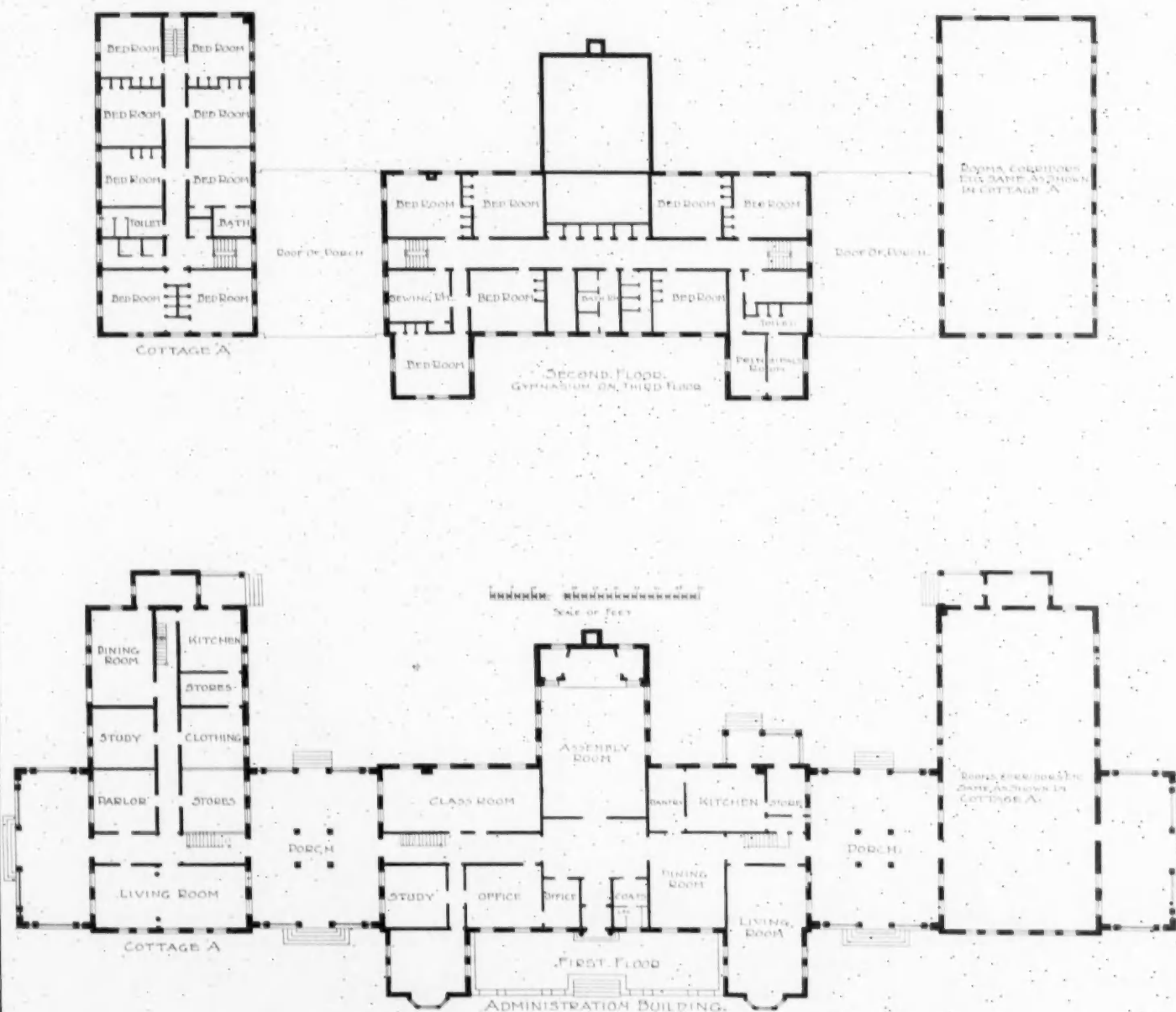
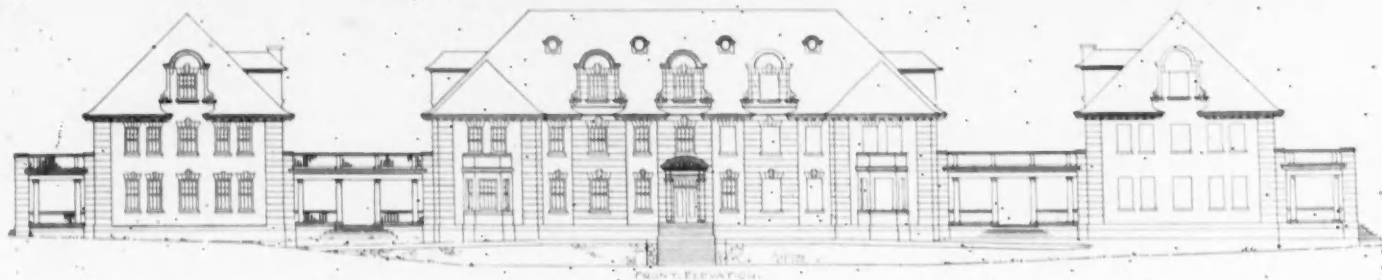


FLOOR PLANS. MRS. DOWS SCHOOL, BRIARCLIFF MANOR, N.Y.
H. VAN BUREN MAGONIGLE, ARCHITECT.

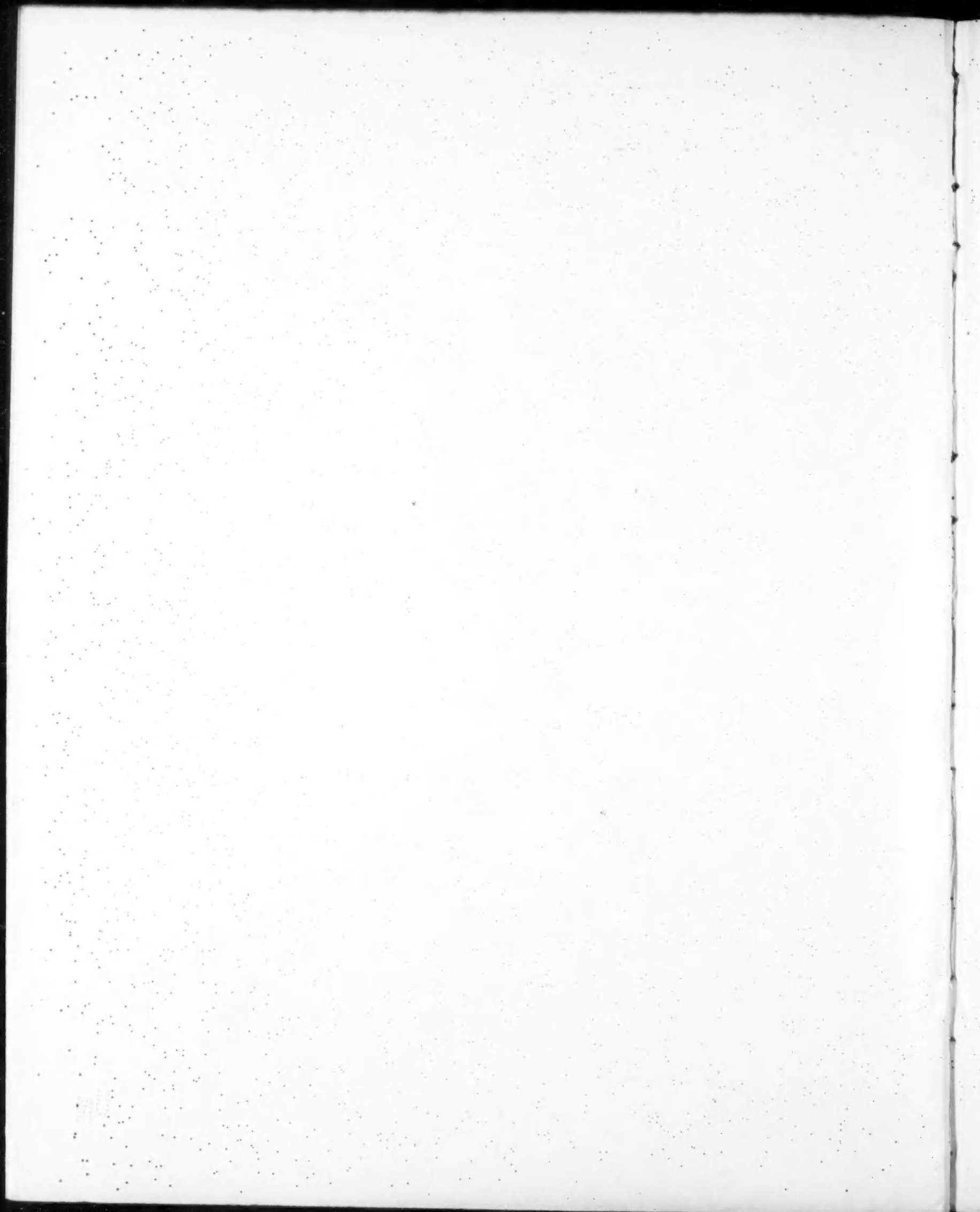


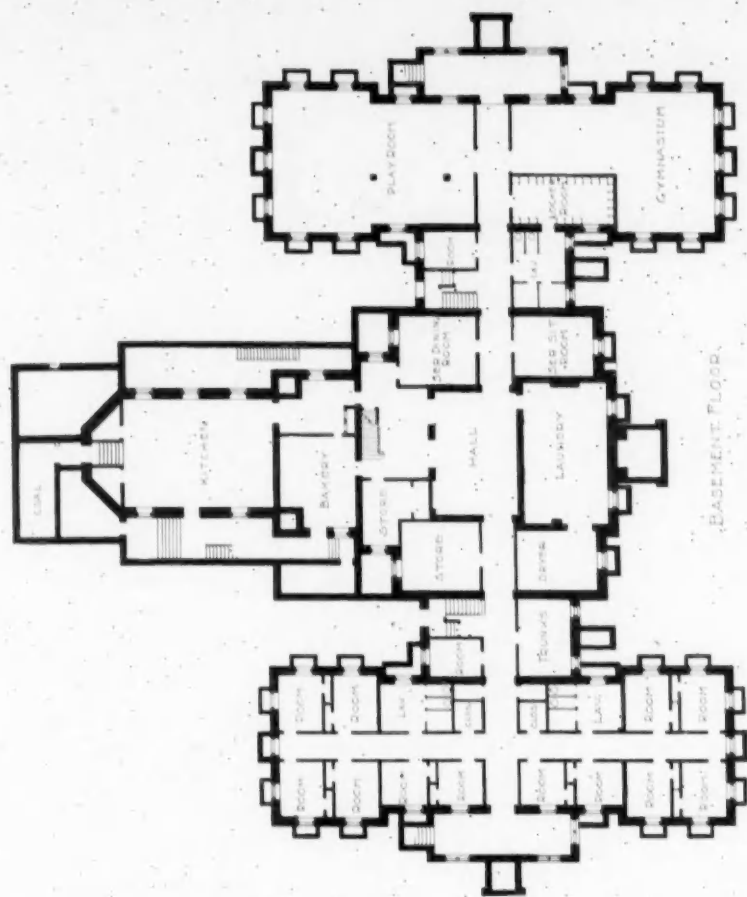
VOL. 15, NO. 9.

PLATE 125.



EGENTON ORPHAN ASYLUM, BALTIMORE MD
WYATT & NOLTING, ARCHITECTS





BASMENT FLOOR.

WILLIAM L. ELKINS MASONIC HOME

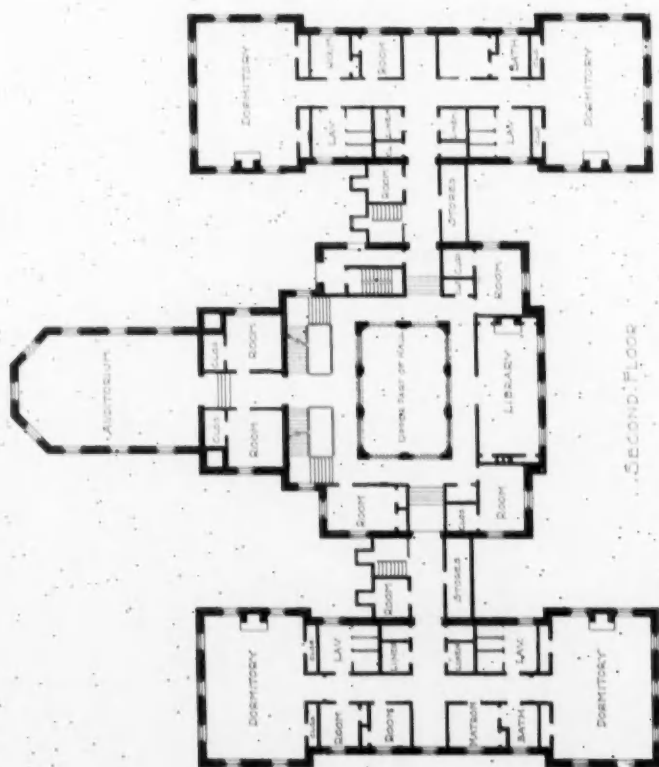
FOR ORPHAN GIRLS.

BROAD STREET AND HUNTING PARK AVENUE.

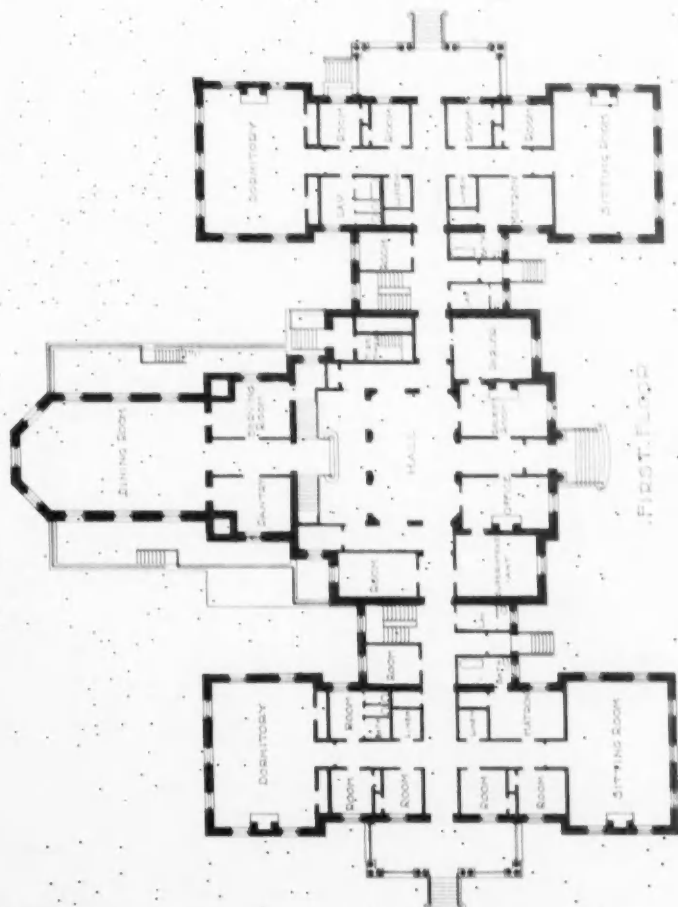
PHILADELPHIA, PENN.

HORACE TRUMBauer,

ARCHITECT.



SECOND FLOOR.



FIRST FLOOR.